Reducing Polarization: Some Facts for Reformers

Nolan McCarty
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ABSTRACT

In response to the governance problems associated with excessive party polarization in American national and state governments, many reformers now seek to alter existing electoral institutions to reduce polarization and its effects. Unfortunately, many existing proposals are based on premises that lack empirical foundation. This essay outlines a set of empirical regularities about polarization in the United States that have important implications for the appropriateness and efficacy of reform proposals. In the conclusion, I outline some approaches to polarization that are consistent with the empirical facts.

I. INTRODUCTION

On January 3, 2015, the New York Times published an article entitled “Departing Lawmakers Bemoan the Lack of Compromise.”1 The article features four departing members of Congress with a combined 120 years of legislative experience. The lawmakers include two Democrats, Senator Tom Harkin of Iowa and Representative Henry Waxman of California, and two Republicans, Senator Saxby Chambliss and Representative Jack Kingston, both of Georgia. Notably, the two Democrats were known as staunch liberals while the two Republicans were reliable conservatives. Yet, all four decry the effects of the partisan and ideological polarization which they believe has led to serious erosion of the capacity of Congress to get things done. Each former legislator recalls past bipartisan compromises

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that they doubt could be accomplished in today's political environment.

What is remarkable about the story, however, is how unremarkable it is. Such articles have become a staple following every federal election and notable legislative retirement. Even Congressional obituaries routinely contrast the Congress of old with today's less functional institution.2

Clearly, retiring legislators are not the only ones concerned about partisan polarization in Washington and its impact on governance. Political scientists have devoted considerable attention to developing an understanding of the origins of political polarization and its effects on policymaking.3 At the same time, journalists and reform activists have also become interested in polarization, especially in terms of what can be done about it.4

2 A typical passage following the death of Senator Edward Brooke: “A skilled coalition builder at a time when Congress was less ideologically divided than it is today, Mr. Brooke shunned labels, but he was seen as a centrist. His positions and votes were consistently more liberal than those of his increasingly conservative Republican colleagues.” Douglas Martin, Edward W. Brooke III, 95, Senate Pioneer, Is Dead, NEW YORK TIMES (Jan. 5, 2015), available at http://www.nytimes.com/2015/01/04/us/edward-brooke-pioneering-us-senator-in-massachusetts-dies-at-95.html, archived at http://perma.cc/SV9P-S6LY.


While a wide variety of ideas have been discussed in journalistic and reform circles, the most common prescriptions for reducing polarization tend to fall into one of three areas. Perhaps the most common suggestion is that “gerrymandered” legislative districts are a significant source of polarization and that turning redistricting decisions over to non-partisan bodies can reduce legislative conflict. The second argument centers around the use of partisan primaries to nominate legislative candidates. If primaries were more open to moderate and independent voters, so the theory goes, those elections would be considerably less likely to produce extreme nominees. Finally, many observers blame the legislators’ reliance on campaign contributions from groups and citizens with extreme preferences. Accordingly, public financing of campaigns, limits on large donors, and/or subsidies for small donors have been proposed to battle polarization.

Unfortunately, when it comes to polarization, academic and public discussions are often completely out of sync. In most cases, the reform agenda is based on premises that have been outright rejected by the academic consensus. In other cases, the proposals proffered lack solid social scientific evidence to back the claims.

Consider the claims about gerrymandering. The argument fails a simple test—it cannot explain the near-parallel polarization of the U.S. Senate, which has obviously never been redistricted. Nor can gerrymandering explain how House members from states with a single congressional district (also not subject to gerrymandering) have also become more extreme. In more sophisticated studies, the estimated effects of gerrymandering on the House range from small5 to nearly nil.6


5 SEAN M. THERIAULT, PARTY POLARIZATION IN CONGRESS Chapter 4 (2008).

Yet the idea is so persistent that a prominent political scientist has labeled it a "zombie" idea—one that is dead but cannot be killed.7

Arguments about the polarizing effect of partisan primary elections also do not stand up well to academic scrutiny. First, the timing is all wrong. Primaries have tended to become more open to participation by independents as polarization has increased.8 Second, arguments about partisan or "closed" primaries have been rejected by statistical analyses.9 Perhaps the most popular reform proposal is to do away with partisan primaries altogether and nominate general election candidates via the non-partisan "top-two" system recently adopted by California. Under the "top-two" system, a non-partisan primary is held where the top two vote getters (regardless of party) move to the general election ballot.10 Because the top-two reform is relatively recent, there is not a lot of data, but the early returns are decidedly mixed.11 The arguments about primaries may not yet be zombies, but they indeed are on life support.


8 Hirano et al. have studied the history of Senate primaries and found that the introduction of a primary had no effect on polarization in the Senate. They also refuted a common corollary argument that primaries have become polarizing because turnout has fallen—it turns out primary turnout has always been low. Shigeo Hirano, James M. Snyder Jr., Stephen Ansolabehere, & John Mark Hanson, Primary Elections and Partisan Polarization in U.S. Congressional Elections, Q.J. POL. SCI. 5(2):169-91 (2010).


10 Reformers generally argue that moderate candidates would be advantaged by such a system because some supporters of the minority party will support the more moderate candidate of the majority party, which will lead to the nomination and victory of moderates.

11 Bullock and Clinton investigated California's short-lived move from a closed primary to a blanket primary in which any registered voter can vote for candidates of either party. (A blanket primary differs from a top-two primary only in that a top-two primary may result in two general election candidates of the same party. In the California blanket primary, the highest Republican and Democratic vote-getters moved to the general election.) They found that the change led to more moderate candidates in competitive districts, but not in districts where one party had a clear majority. Thus, their study provides little reassurance that blanket or top-two primaries are a solution to the problem of a lack of inter-party competition. Will Bullock & Joshua D. Clinton, More a Molehill than a Mountain: The Effects of the Blanket Primary on Elected Officials' Behavior from California, J. POL. 73(3):915–30 (2011). In a more recent study, Ahler,
Campaign finance is an area in which the reformers may be onto something. While the research is preliminary, there is growing evidence that certain features of our campaign finance system do contribute to polarization. But as I discuss below, the implications of research in this area are often not those presumed by reformers focused on financial contributions of corporations and the wealthy. In fact, campaign finance reform targeting polarization may run counter to many other worthwhile objectives.

In the hopes of closing the gap between academic scholarship and the discussions of reform advocates, this article takes up two tasks. The first is to present a set of facts and empirical regularities about polarization that are often missing from discussions about the remedies for polarization. A knowledge and appreciation of these facts not only helps one to

Citrin and Lenz conduct an experiment in which voters are randomly provided either a “top-two” style non-partisan ballot or a closed partisan ballot. They find that moderate candidates fared no better on the top-two ballot. They provide additional evidence that indicates that voters were unable to discern the more moderate candidate when presented the option to vote for her. Douglas J. Ahler, Jack Citrin, & Gabriel S. Lenz, Do Open Primaries Help Moderate Candidates? An Experimental Test on the 2012 California Primary, LEGISLATIVE STUDIES QUARTERLY (Forthcoming). Kousser, Phillips and Shor actually find that the top-primary made things worse as representatives became less tied to the median voter of their district. Thad Kousser, Justin Phillips & Boris Shor, Reform and Representation: A New Method Applied to Recent Electoral Changes, (Aug. 19, 2015), available at http://ssrn.com/abstract=2260083, archived at http://perma.cc/Q3M9-PHTE. Because California implemented its Citizens Redistricting Commission at the same time as the top-two primary, it is not clear which reform generated the perverse outcome. CHRISTIAN GROSE, THE ADOPTION OF ELECTORAL REFORMS AND IDEOLOGICAL CHANGE IN THE CALIFORNIA STATE LEGISLATURE (The Schwarzenegger Institute ed., 2014). It is not clear however whether those patterns will persist over the long run. No moderating effects are apparent in updates to the Shor and McCarty data on state legislative ideology (these measures are discussed below). Boris Shor & Nolan McCarty, The Ideological Mapping of American Legislatures, AM. POL. SCI. REV. 105(3):530–51 (2011).

In the discussion that follows, I maintain the presumption that it would be desirable to reduce legislative polarization. Of course, some degree of party differentiation is healthy for a democracy as it provides clear choices to voters and makes it easier to hold elected officials accountable. In fact, in the 1950s a task force of the American Political Science Association argued that the central problem in American politics was a lack of polarization. AMERICAN POLITICAL SCIENCE ASSOCIATION, TOWARD A MORE RESPONSIBLE TWO-PARTY SYSTEM: A REPORT OF THE COMMITTEE ON POLITICAL PARTIES OF THE AMERICAN POLITICAL SCIENCE ASSOCIATION (1950). But in a case of rare agreement, the academic literature tends to concur with the popular sentiment that polarization has reached a level such that its costs exceed its benefits. See Nolan McCarty, The Policy Effects of Political Polarization, in TRANSFORMATIONS OF AMERICAN POLITICS (Paul Pierson & Theda Skocpol eds., 2007).
understand why the evidence in favor of popular reforms is often so weak, but also why some measures may ultimately be counterproductive. The second objective is to plant some plausible reform ideas that do not contradict important empirical regularities and have at least some tentative support in recent political science scholarship. My intention is not to present well-worked-out reform proposals. In fact, I would withhold my endorsement from some on the basis of my concerns about unintended consequences. My suggestions are merely intended to nudge the discussion of electoral reform back in the direction of the evidence.

II. TRENDS IN POLARIZATION

One important set of facts omitted from most discussions of our contemporary polarized politics is the history of how we reached the current high levels of party conflict. It is neither true that “it has always been this bad” nor is it true “that it has never been this bad.” To get some sense of the history, Figure 1 presents a measure of congressional polarization in the United States House and Senate developed by McCarty, Poole and Rosenthal known as DW-NOMINATE. Underlying DW-NOMINATE is a statistical model that estimates the liberal/conservative position of legislators based on observed roll call voting behavior. Larger estimated scores represent more conservative positions. The simplest way to understand the statistical model is that it associates a conservative position for legislators who vote often with conservatives and never with liberals. Liberals are those who vote with other liberals and never with conservatives whereas moderates are those who vote with both liberals and conservatives. The DW-NOMINATE scores of individual legislators are aggregated into these measures so that the polarization measure is just the average difference in the scores of Republicans and Democrats.

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13 The argument for the latter proposition is a bit stronger, however.  
15 See id. For a more extensive discussion of the measurement, see McCarty, Poole & Rosenthal, supra note 6.  
16 An important feature of DW-NOMINATE is that we can use overlapping cohorts of legislators to make inter-temporal comparisons about the degree of polarization. For example, we can establish that in relative terms Ted Cruz is more conservative than John Tower even though they never served in the Senate together. We can do this by
The first takeaway of Figure 1 is that the level of polarization in Congress has varied dramatically over the course of the Democrat-Republican party system that followed Reconstruction. Not surprisingly, congressional polarization was quite high following the Civil War and Reconstruction. But it declined markedly from the 1920s to the 1950s where the greatest declines appear to be associated with the Great Depression and World War II. Partisan differences in Congress remained at fairly low levels from the 1950s to the 1970s. During this period, both the Democrats and Republicans were divided ideologically between liberal and conservative wings.\textsuperscript{17}

The current trend towards greater and greater polarization began in the late 1970s and was detectable by academics as early as 1982.\textsuperscript{18} This fact lies uncomfortably against any narrative that pivots on a single event or "great person." The trend precedes the election of Ronald Reagan, the "Borking" of Robert Bork, the impeachment of Bill Clinton, and the election of Barack Obama. I dare say that if the x-axis labels of Figure 1 were removed, even the most astute political observers would be hard pressed to locate those events on the figure. Furthermore, these long-term patterns alone raise skepticism about the potential efficacy of many proposed reforms. Consider that gerrymandering was less legally constrained, campaign finance less regulated, and primaries more closed during the less polarized 1950s than they are today.\textsuperscript{19}

The second takeaway point is that the House and the Senate have remarkably similar histories with respect to leveraging that John Tower served with Phil Gramm who served with Kay Hutchison, who served with John Cornyn who served with Ted Cruz.

\textsuperscript{17} Indeed, the intra-party divisions were so great that the American Political Science Association commissioned a report arguing for more partisan polarization.


\textsuperscript{19} Prior to the Supreme Court decision in Baker v. Carr, 369 U.S. 186 (1962), legislative districts were not constrained to have equal populations and courts rarely intervened in districting cases. The modern infrastructure for regulating campaign finance was not created until the Federal Election Commission Act of 1974. The number of closed legislative primaries has fallen sharply over the period of increased polarization. In 1982, 20 states had closed primaries for both the Democratic and Republican parties. In 2012, there were only 13 closed Republican primaries and 12 closed Democratic primaries. See Eric McGhee, Open Primaries, California Public Policy Institute 2010 (technical appendix), available at http://www.ppic.org/content/pubs/other/210EMAI_appendix.pdf, archived at http://perma.cc/3RZB-MBJD, for the underlying data.
polarization. The two time series tend to decline together, stabilize together, and increase together. Generally, there is a little less polarization in the Senate, but there are periods in which the Senate was the more polarized body. Although polarization in the Senate leveled off in the early 2000s, it has increased faster than it has in the House over the past half-dozen years.

The similar trajectories of the House and Senate also have implications for evaluating reform ideas. Any compelling reform proposal ought to be one which addresses a mechanism present in both the House and the Senate. For example, Figure 1 casts doubt on the importance of congressional districting reform since one cannot blame gerrymandering for Senate polarization.

Explanations specific to the Congress and national politics also contradict the findings of Shor and McCarty, who develop measures of state legislative polarization since the 1990s that are comparable to those used for Congress. They find that on average state legislatures have become more polarized over time (although there is variation across states). Moreover, they find that most state legislatures are more polarized than the U.S. House.

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20 See generally Shor & McCarty, supra note 11.

21 Id.

22 Id.
Figure 1: *Polarization in the U.S. Congress 1877–2014*. Computed from DW-NOMINATE scores (McCarty, Poole and Rosenthal 1997). The polarization measure is the difference in the mean score for Republicans and the mean score for Democrats.

Figure 2 presents a third historical fact about polarization that is important to keep in mind when discussing reform. Rather than a case of both parties moving toward the extremes, polarization over the past forty years has been very asymmetric. It is overwhelmingly associated with the increased movement of Republican legislators to the right. Each new Republican cohort has compiled a more conservative record than the returning cohort. Importantly, this has been the case since the 1970s, it is not a reflection of the emergence of the “Tea Party” movement in 2009.²³

The Democratic party has not followed a similar pattern. While some new cohorts are more liberal than the caucus on average, many are more moderate. The slight movement of the

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²³ At least in the case of the Senate, the Tea Party might have *decreased* polarization through its support of extreme candidates such as Christine McDonnell, Richard Mourdock, and Todd Akin that ultimately cost the Republican party seats that were won by moderate Democrats.
Democratic party to the left can be accounted for by the increase of African-American and Latino legislators in its caucus. Outside of majority-minority districts, the average position of the Democratic party has changed very little.\textsuperscript{24}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure2.png}
\caption{Party Positions in the U.S. House 1877–2014. Figure shows average DW-NOMINATE scores by party.}
\end{figure}

III. PATTERNS OF POLARIZATION

The next set of facts are based on the pattern of polarization across legislative districts. There are two logical ways in which a legislative body can be polarized.\textsuperscript{25} The first is what I call geographic sorting. Polarization due to sorting occurs when liberal Democrats are increasingly likely to win elections in liberal districts and conservative Republicans are increasingly likely to represent conservative districts. Such sorting can produce polarization even when the parties differ very little in

\textsuperscript{24} While there is more variation in the movements of the Democratic and Republican parties at the state level, Republicans have become more extreme on average in state legislatures. \textit{Asymmetric Polarization in State Legislatures? Yes and No, MEASURING AMERICAN LEGISLATURES, available at} \url{http://americanlegislatures.com/2013/07/29/partisan-polarization-in-state-legislatures/}, \textit{archived at} \url{http://perma.cc/T2W3-7K3C}.

\textsuperscript{25} For a more extensive discussion, see McCarty, Poole & Rosenthal, \textit{supra} note 6.
how they represent moderate districts. Such a hypothetical pattern is shown in the left panel of Figure 3. In the figure, the x-axis represents the conservatism of the district while the y-axis represents the conservatism of the representative. The Democrats (token D) represent almost all of the liberal districts and the Republicans (token R) represent almost all of the conservative districts. But Democrats and Republicans represent the moderate districts very similarly. This hypothetical legislature would have a polarization score of .9.

![Figure 3: Polarization from Sorting and Divergence](image)

The second pattern is what I call divergence. Divergence occurs when Democratic and Republican legislators represent otherwise identical districts in increasingly extreme ways. Consequently, divergence leads to polarization even if there is a low correlation between the party of the representative and the preferences of the median voter of her constituency. Panel (b) of Figure 3 illustrates polarization due to divergence. In that panel, both Democrats and Republicans represent liberal and

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conservative districts, but there is a gap between the parties at each level of district conservatism. The hypothetical legislature in panel b also has a polarization score of .9.

These different forms of polarization have distinct implications for reform possibilities. If polarization is a matter of sorting, then reforms to reduce the number of extreme districts or those designed to enhance inter-party competition make sense. But if polarization is primarily caused by with-in district divergence, such reforms may be ineffectual or even counter-productive.27

The available evidence shows that the contemporary trend is mostly a process of divergence. This pattern is demonstrated by comparing the two panels of Figure 4.

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27 McCarty et al., supra note 3, at 20.
Figure 4: Sorting and Divergence 1973 and 2008

The figure plots DW-NOMINATE scores against Republican presidential vote for two congressional terms. A lowess smoothing line is included for each party. The widening gap between the parties at each level of presidential vote indicates greater divergence.

This figure plots the conservatism score for each House member against the Republican presidential vote (a measure of
district conservatism) for two different elections—1972 and 2004. A local regression line is included for each party to show the expected conservatism of a member for a given level of presidential vote. A larger gap between these lines indicates a greater degree of divergence. A simple comparison reveals how the gap between the parties for moderate districting has grown since the 1970s. The sorted districts are overwhelmingly urban and minority districts. Note that there are few sorted Republican districts even though it is the Republicans that have polarized the most.

McCarty, Poole and Rosenthal report that almost two-thirds of the increase in polarization between 1972 and 2004 can be accounted for by divergence.28 Shor and McCarty also find that divergence rather than sorting is the dominant pattern in state legislatures.29 In all but four states, they find that divergence accounts for more than 80% of the level of polarization.

In sum, any proposed reform for tackling polarization must account for the fact that Democrats and Republicans represent nearly identical districts in very distinctive ways. As McCarty, Poole and Rosenthal argue, a focus on gerrymandering is hard to square with divergence-based polarization.30 The underlying hypothesis linking gerrymandering to polarization is that politicians draw maps that minimize electoral competition. Thus, if gerrymandering were to be the cause of polarization, the mechanism would certainly have to be through greater sorting. However, gerrymandering provides no explanation as to why Republicans and Democrats would represent moderate districts in increasingly divergent ways.

IV. POLARIZATION AND ELECTORAL COMPETITIVENESS

A common belief among reformers is that polarization is strongly associated with declining inter-party electoral competition. This assumption is most clearly held by those who propose districting reform. The "gerrymandering" hypothesis is based on the notion that state legislators draw district boundaries that artificially depress inter-party competition. Freed of competition from the other party, legislators are then

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28 McCarty, Poole, & Rosenthal, supra note 6, at 673 tbl. 2.
29 Shor & McCarty, supra note 11, at 547–48, tbl. 2 & fig. 19.
30 See generally McCarty, Poole, & Rosenthal (2006), supra note 6.
allowed to cater to their bases and extreme interest groups. Arguments about primary election reform also hinge on a lack of inter-party competition. If general elections are not competitive, the partisans who dominate the primary electorates have very little reason to nominate "electable" candidates who appeal to the political center. Despite the widespread belief in declining competition, however, the evidence that legislative elections have become less competitive or that non-competitive elections cause polarization is rather weak.

One of the most common ways of measuring the competitiveness of legislative elections is to examine the distribution of presidential vote shares across districts. The underlying premise is that presidential vote share is a good measure of district partisanship. Districts that vote heavily Democratic in presidential elections are unlikely to elect Republican representatives and vice versa. But districts that split their presidential votes are more likely to see competitive legislative elections. Thus, scholars have used the presidential vote as a measure of district competitiveness on the premise that it is uncontaminated by the legislative campaigns.

If legislative elections were becoming less competitive, we would expect to see average district presidential vote share margins growing or see fewer districts at parity in presidential voting.

31 While political scientists have used presidential vote alongside a variety of other measures of competitiveness, the use of presidential vote is very common in journalistic and activist circles. See, e.g., Monopoly Politics, THE CENTER FOR VOTING AND DEMOCRACY (July 23, 2012), available at http://www.fairvote.org/research-and-analysis/congressional-elections/monopoly-politics-2012/, archived at http://perma.cc/M5XZ-W577.

32 Suppose one were to use legislative vote shares instead. Such a measure would conflate the underlying features of the district with decisions about candidate entry, quality, and campaign spending.
Figure 5 shows the average absolute mean-deviated vote share for congressional districts for all elections since 1992. For example, a district with a 56% Democratic vote when the average district has a 48% share has an absolute mean deviated vote of 8. Under the same scenario, a district with a 38% Democratic vote has a score of 10 while the average district has a score of 0. So this average measures the overall level of competitiveness where higher scores mean less competitive.

Figure 5 does appear to indicate declining competition as the average vote margins have increased. But it is important to note that the increase has little or nothing to do with districting. Figure 5 plots the vote share variable for multiple presidential elections for the same congressional districts. Thus, we can determine how much the measure changes based on districting and how much of the change just reflects the peculiarities of each presidential election.

33 The main purpose of the mean deviation is to eliminate election specific effects unrelated to the underlying competitiveness of House districts.
Note that redistricting in 2002 and 2012 had no impact on the measure when the results of the same presidential election are compared. When the 2000 election results are applied to the pre-reapportionment districts, the average mean-deviated vote margin is about 11.4 and rises only to 11.5 under the districts drawn in 2002. Similarly, when the 2008 election returns are applied to the 2010 congressional districts, the average margin is 12, the same margin under the post-reapportionment districts. The apparent decline in competition following the latest reapportionment is an artifact of using the 2012 presidential election.

The use of the average margin may be misleading if what one wants to know is how many districts are in play in any given election year. So Figure 6 plots the percentage of districts where the absolute mean-deviated presidential vote margin is less than 10 points. Using this measure, there was a slight decline in competitiveness following the reapportionment in 2000—roughly the equivalent of 8 seats. But there is no similar decline following the 2010 reapportionment.

![Figure 6](image)

Figure 6: Percentage of Districts with Normalized Margin of Less than 10%. The figure is based on mean-deviated presidential vote share for each district and for each presidential election. Each marker shows the percentage of districts for which the adjusted margin was less than 10%.
Figures 5 and 6 are consistent, however, with a decline in electoral competition unrelated to redistricting. The most-likely culprit is the long-term regional realignment in presidential voting. Such a realignment is unlikely to be reversed through electoral engineering.

Measures of electoral competitiveness based on presidential votes have certain conceptual limitations. Ultimately, inter-party competition should be measured as the ex ante likelihood that a seat could switch partisan hands. Such ex ante measures are difficult, but we can look at the ex post likelihood by examining the magnitude of partisan swings over time. Figure 7 plots the absolute swing in party seat share for every election since the 1930s as well as the associated three-election moving average. It is hard to see any trend that matches up with the polarization trend. The magnitude of the swings declines from the 1930s to the 1970s when polarization was low. There is no obvious trend following the 1970s. It appears that there may be a new upward trend beginning in 2006. Every swing from 2006 to 2014 exceeded every swing from 1996 to 2004. So inter-party electoral competition is far from dead.

![Partisan Swings in the U.S. House](image)

Figure 7: Partisan Swings in the U.S. House. The figure shows the absolute swing in the partisan seat shares for each election from 1936 to 2014.

A second related question is whether inter-party electoral competition affects the level of polarization in a legislature. To
address this question, I will use the data on polarization in state legislatures developed by Shor and McCarty.34

First, I consider whether the number of state lower house districts that are competitive at the presidential level correlate with the level of polarization observed in the lower house. The table below presents the simple correlation for three presidential elections between lower house polarization and percentage of districts with a presidential vote margin of less than 10%.35

<table>
<thead>
<tr>
<th>Election</th>
<th>Correlation</th>
<th>p-value</th>
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</thead>
<tbody>
<tr>
<td>2000</td>
<td>0.024</td>
<td>0.865</td>
</tr>
<tr>
<td>2004</td>
<td>-0.014</td>
<td>0.930</td>
</tr>
<tr>
<td>2008</td>
<td>0.391</td>
<td>0.025</td>
</tr>
</tbody>
</table>

Table 1: Correlation Between Polarization and District-Level Inter-Party Competition

If low levels of inter-party competition at the district level produced higher levels of legislative polarization, we would expect to see a negative and statistically significant correlation for each election. There is a negative correlation, however, for only one election. But the magnitude is very small and the p-value indicates that we cannot reject the null hypothesis of no relationship between inter-party district-level competition and polarization. The only statistically significant correlation is for 2008 where the correlation is positive. In sum, these data do not suggest that district-level electoral competitiveness affects polarization at the legislative level.36

In summary, the evidence does not support the widely held notion that polarization has resulted from a lack of inter-party competition at the constituency level. Standard measures of competitiveness based on presidential vote appear to be driven by the particularities of the presidential elections rather than

34 Shor & McCarty, supra note 11.
aspects of the allocation of voters across districts. Moreover, competitiveness measured by seat swings does not appear to have declined. Evidence from state legislatures finds no impact of district-level competitiveness on polarization. These empirical facts call into question the underlying arguments used to support reforms to redistricting and primary institutions. Given the lack of support for the underlying premises, it is not surprising that such little evidence has been mustered from the direct effects of gerrymandering or partisan primaries on reform.

V. SOME FACTS THAT RAISE REFORM POSSIBILITIES

While the evidence discussed above casts considerable doubt on many of the most popular remedies, some recent work in political science suggests that there may be some institutional fixes that have the potential to reduce polarization.

Drawing on this work, I will outline three possible approaches to polarization: homogenize legislative districts, strengthen parties, and regulate individual campaign contributions (but not necessarily corporate contributions). Many observers will find these recommendations to be counter-intuitive if not perverse. Clearly, there may be other normative considerations unrelated to polarization that may make these reforms undesirable. So my point is not to advocate for such changes, but to demonstrate the complex trade-offs and potential unintended consequences of electoral reform targeted at polarization.

A. Creating Homogeneous Electorates

For those who contend that declining district-level inter-party competition is a cause of polarization, the answer is to create more heterogeneous districts. Such districts would be more likely to swing back and forth between Democratic and Republican representatives and would therefore induce competition that would reduce the chances of electing an extreme legislator.

Existing political science research, however, questions the wisdom of heterogeneous legislative districts. Brunell argues that heterogeneous districts maximize the average preference
divergence between citizens and their representative. To support this argument, he shows that citizens in competitive legislative districts report less satisfaction with Congress. Gerber and Lewis show that legislators from heterogeneous districts compile voting records less congruent with the median voters of their district. Similarly, Levendusky and Pope find that House members representing districts with heterogeneous voter preferences compile more extreme voting records.

Recently, my collaborators and I have added to the evidence against heterogeneous districts by demonstrating how such districts produce greater levels of partisan divergence. Our theoretical argument is that heterogeneity creates greater levels of electoral uncertainty. Such uncertainty weakens the centripetal incentives toward convergence and allows policy-motivated candidates to pursue policy goals that diverge from the preferences of the median voter.

To provide support for this argument, we supplement the Shor and McCarty data on the ideal points of state senators with data on the distribution of preferences within each state senate district. The data on citizen preferences is drawn from Tausanovitch and Warshaw. The citizen preference data is computed by linking the responses on policy questions across a number of large surveys to produce estimates of the liberal-conservative position of over 350,000 respondents. With such a large sample, we are able to estimate the heterogeneity of each

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37 Thomas Brunelli, Redistricting and Representation: Why Competitive Elections are Bad for America (2010).

38 See id. at 36.


state senate district as the standard deviation of the respondent ideal points.  

First, we demonstrate that polarization in a state senate is strongly related to the average preference heterogeneity of its districts. Figure 8 plots the state average of our measure of heterogeneity against the difference in party medians derived from the Shor-McCarty ideal points. The figure reveals a strong positive correlation between the average district heterogeneity and the polarization of the state senate. This correlation is just as large as the correlation between polarization and the variation of median ideal points across districts. Thus, the variation of voter preferences within districts matters as much as the variation across districts.

Unlike many arguments about polarization which are predicated on ideological sorting across districts, our argument explicitly predicts that the link between polarization and district heterogeneity operates through divergence. Thus, our primary empirical finding is that Republicans and Democrats represent heterogeneous districts in divergent ways. Figure 9 demonstrates this point. The sample of state senate districts is divided into three groups based on the standard deviation of citizen preferences. For each group, the Shor-McCarty ideal points are plotted against the mean voter preference. Clearly, as one moves from the least heterogeneous districts to the most heterogeneous districts, the gap between Democratic and Republican legislators grows at each level of citizen preference.

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44 We replicate our analysis for the U.S. House and for state lower chambers. The results for the U.S. House are very similar. The results for state lower chambers are somewhat weaker because our measures of heterogeneity are far less precise at that level.
Figure 8: District Heterogeneity and Legislative Polarization. The x-axis plots the average standard deviation of voter preferences across state senate districts using the data from Tausanovitch and Warshaw.\textsuperscript{45} The y-axis plots legislative polarization using the difference in party medians from Shor and McCarty.\textsuperscript{46}

The results of Figure 9 are robust to multivariate regression and matching models which control for a number of factors that might confound the relationship between district heterogeneity and partisan divergence.\textsuperscript{47} The regression results indicate that Democrats and Republicans representing districts at the 75th percentile of district heterogeneity diverge 0.1 units on the Shor-McCarty scale more than those representing districts at the 25th percentile. The magnitude of this effect is about 25% of the inter-quartile range of polarization measures across the states.

\textsuperscript{45} See generally, Tausanovitch & Warshaw, supra note 43.
\textsuperscript{46} See generally, Shor & McCarty, supra note 11; McCarty et al., supra note 3.
\textsuperscript{47} As an even stronger test for a causal relationship, we look at what happens when a district goes from Republican to Democratic hands or vice versa. The resulting difference in the ideal points of the new legislator and old legislator is considerably larger in the heterogeneous districts, as our argument would predict.
Figure 9: Voter Heterogeneity and Divergence. Each panel represents a tercile of state senate districts based on the heterogeneity of citizens' preferences. The x-axis of each panel plots the mean citizen preference. All preference measures are derived from Tausanovitch and Warshaw.\textsuperscript{48} The y-axis shows the ideal point of state senators from Shor and McCarty.\textsuperscript{49}

Inducing political competition by striving for more heterogeneous districts runs into additional problems. Given the strong residential clustering of citizens with similar social, economic, and political profiles, the creation of heterogeneous districts also certainly requires drawing what legal scholar Nicholas Stephanopoulos calls "spatially diverse" districts.\textsuperscript{50} Spatial diversity refers to the variation of individual attributes (e.g. income, race, education) across geographic space. For example, a spatially diverse district might be one where conservative, wealthy white neighborhoods are combined with low income, liberal, minority neighborhoods. Stephanopoulos argues that spatially diverse districts tend to perform poorly on many indicators including voter engagement, participation, and representation.\textsuperscript{51} But most importantly for this discussion, he finds a greater degree of ideological polarization among

\textsuperscript{48} See generally Tausanovitch & Warshaw, supra note 43.

\textsuperscript{49} See generally Shor & McCarty, supra note 11.

\textsuperscript{50} See generally Nicholas O. Stephanopoulos, Spatial Diversity, 125 HARV. L. REV. 1903 (2011).

\textsuperscript{51} See generally id.
members of the House of Representatives who represent spatially heterogeneous districts than those representing other types of districts.

The upshot of these findings is that a primary objective of redistricting should be to create legislative districts where the vast majority of the citizens share common political preferences. Achieving this goal will likely require greater deference to existing municipal and administrative boundaries as well as the relaxation of compactness constraints so that similar communities can be connected together into districts despite often unfavorable geographic residential patterns.

B. Strengthening Party Organization

The academic literature and public discussions of legislative polarization in the United States often conflate polarization and partisanship. This confusion arises naturally because the two phenomena are hard to distinguish empirically. For example, it is very difficult to discern whether those increased partisan differences in legislative behavior reflect true ideological changes or simply increased intra-party cooperation and inter-party conflict. Given the difficulty of distinguishing, scholars often use the terms polarization and partisanship almost interchangeably.

This conflation of polarization and partisanship is relevant for discussions of political reform. Many popular prescriptions for reducing polarization call for decreasing the role of political parties. But if polarization in the United States is the consequence of relatively weak parties rather than strong parties, as I argue may be the case, then such reforms will be counter-productive.

To illustrate, consider two scenarios. The first is one with strong legislative parties. Assume that parties are so strong that they behave as unitary actors. The second scenario is one where parties are very weak. The organizations and leaders impose no discipline on candidates and therefore party labels convey no information to voters.

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The strong party scenario perfectly conforms to the model put forth by Anthony Downs. In his model, as is well known, the unified political parties have very strong incentives to converge to the median voter. Any party that fails to position itself in the political center will be defeated by one that does. This convergence prediction continues to hold even if the parties have policy preferences. So with strong parties, there is very little polarization. Both parties cater to the preferences of the median voter.

Now consider the weak party scenario. The autonomous candidates of each party have incentives to converge on the median voter in each district. Voters would be indifferent between the candidates and would metaphorically flip coins. Consequently, half the districts would be represented by Democrats and half represented by Republicans. Moreover, the Democratic districts would be statistically identical to the Republican districts. So there is no polarization on average and Democrats and Republicans represent districts ranging across the spectrum. Both parties are very heterogeneous, but the distributions of legislator positions are the same.

So neither the extremely weak nor the extremely strong party system should be very polarized. Next consider an intermediate case. Jim Snyder and Michael Ting offer a model that closely approximates this middle ground. In their model, voters wish to use party labels to make more informed choices about legislative candidates. If Republican candidates are more conservative on average than Democratic candidates, a voter might use this information in casting her vote in a legislative election even if she did not know the exact locations of the specific candidates. Snyder and Ting also assume that voters are risk averse. So, ceterus paribus, a voter prefers the candidate whose party label provides more precise information about that candidate's position. In other words, voters prefer candidates from homogeneous parties to those from heterogeneous parties.

This aspect of voter preferences gives each party a strong incentive to screen candidates who deviate too far, left or right, from the party's prevailing position. Strong parties are assumed

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to be better at screening candidates and thus better able to reduce the variance in the positions of its candidates. A party that can perfectly screen is equivalent to the Downsian party. If both parties are perfect screeners, each will position itself on the median voter and screen out any candidates with different positions.

But when parties are weaker, they screen candidates imperfectly. For such parties, Snyder and Ting obtain a distinct prediction. That such parties cannot screen out relatively more extreme candidates forces them to position themselves away from the median voter. Thus, weak parties will take divergent positions. Consequently, Republican candidates will tend to win conservative districts and Democratic candidates will win the liberal districts. As a result, there will be considerable polarization in equilibrium.

Polarization is only obtained in an "anti-Goldilocks" case where the parties are not too strong nor too weak. The question of how to best reform the party system to reduce polarization is an empirical one—would reducing the influence of party organization reduce polarization as some would claim, or would it move us toward the anti-Goldilocks point with higher polarization? If the latter, a reform agenda designed to reduce polarization should strive to strengthen the role of party organizations both by enhancing their role in the selection and discipline of candidates and giving them an enhanced capacity to withstand the pressure of extreme interest groups and voters.

To evaluate the effect of party organization on polarization, I draw upon and extend the work of Krimmel who argues that the national parties polarized at least in part because they were forced to turn increasingly to organized interests for resources as traditional partisan resources such as patronage declined.\footnote{Katherine Krimmel, \textit{Special Interest Partisanship: The Transformation of American Political Parties in Government} (unpublished PhD. thesis, Columbia University) (on file with author).} In addition to historical and archival evidence for this change in partisan strategy, Krimmel provides some quantitative evidence that there is lower legislative polarization in states that have historically strong party organizations. Specifically, she finds a strong negative correlation between state legislative

polarization as measured by Shor and McCarty and David Mayhew's measure of "traditional party organizations" (TPO).56

I now build upon Krimmel's analysis. First, I show the bivariate relationship between the differences in party medians for state lower and upper chambers and Mayhew's TPO scores. Each dot represents an annual level of polarization for each state legislature. The data covers the period of 1996 to 2008. Both Figure 10 and Figure 11 show that on average there is a negative relationship between polarization and historical strength of party organizations in the state.

To further explore the relationship between polarization and party strength, I estimated some simple regression models. The dependent variable of each model is either a polarization measure or a measure of the position of a party's legislative delegation. All of these data are drawn from Shor and McCarty. The main independent variable is Mayhew's TPO measure. I include a small set of control variables.57

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56 Mayhew classifies the state party systems of the late 1960s. He identifies states with traditional party organizations as those with local political organizations that meet five criteria. Such organizations 1) are largely autonomous from candidates and outside interests, 2) have longevity, 3) use hierarchical structures, 4) try to influence nominations for office, and 5) rely substantially more on "material" incentives than on "purposive" incentives. That Mayhew's ratings pertain to the situation in the states during the late Sixties has the advantage of making them plausibly exogenous to contemporary levels of polarization. DAVID MAYHEW, PLACING PARTIES IN AMERICAN POLITICS, (1986).

57 First, I include Year to capture the trend toward greater polarization. Shor and McCarty report that there is considerable heterogeneity across states as to whether polarization is increasing or decreasing. I ignore that heterogeneity here and estimate a single time trend. I also include an indicator South to capture regional variation in both polarization and the prevalence of traditional party organizations. Data on Percent African-American and Income Inequality (the Gini coefficient of family income) are also included. For arguments linking polarization and income inequality, see McCarty, Poole & Rosenthal, supra note 6.
McCarty reports the estimates of these models for lower and upper chambers, respectively. In both models, states with a recent history of traditional party organization have less legislative polarization than those that do not. States with traditional party organizations have differences in party medians that are about 0.4 lower than states with weaker party organizations. The magnitude of this effect is equivalent to a one-standard deviation reduction in polarization and two-thirds of the inter-quartile range. So the correlation of party organization and polarization is both large and statistically significant. Importantly, the results are robust to the inclusion of controls for region, economic inequality, and racial composition.

58 McCarty, supra note 52, at 142, tbl. 9.1.
McCarty also estimates models for each party separately. The results suggest that party organization has an asymmetric effect across parties. The effect on Democratic legislators is small and imprecise. The effect on Republican legislators, however, is quite large. This finding is consistent with several findings that associate the recent increases in polarization to the rightward movement of the Republican party. These conservative shifts were concentrated in states with weaker party organizations.

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59 McCarty, supra note 52, at 142, tbl. 9.1.

The takeaway is that most academic observers, journalists, and activists share a too simplistic view of the relationship between party organizations. This view tends to blame polarization on a strengthening of political parties. Instead, the opposite view is better supported empirically. Perhaps instead of sidelining parties in the nomination process and campaign finance system, we should be enhancing the role of parties. While America's anti-party political culture may preclude any explicit attempt to strengthen parties, it is important to remember that any tinkering of the campaign finance system, congressional rules, primary nomination systems, or redistricting may have unintended consequences related to weakening parties.\textsuperscript{61}

C. Regulating Individual Campaign Contributors

Following the Supreme Court's controversial decision in \textit{Citizens United v. Federal Elections Commission},\textsuperscript{62} concerns about an influx of corporate and labor union independent expenditures into American elections has topped the list of concerns for reformers. While the decision and the new campaign finance regulatory regime that it represents raises many valid worries, political scientists have been very dubious of any direct link between corporate and labor union election financing and polarization. Although labor unions do tend to concentrate their funding on liberal and pro-labor Democrats, corporations are not nearly as ideological. While some corporations concentrate their money on conservative, pro-business Republicans, "access-oriented" corporations spread their largess across the ideological spectrum. As a result, McCarty, Poole and Rosenthal demonstrate that extreme legislators obtain no fundraising advantages from corporate political action committees (PACs).\textsuperscript{63}

But recent research has found much more promising evidence for a different channel through which campaign finance


\textsuperscript{62} 558 U.S. 310 (2010).

\textsuperscript{63} McCarty, Poole, & Rosenthal, \textit{supra} note 6, at 1146–55.
may affect polarization—increased contribution activity by ideological individuals. While growth contributions by political action committee contributions have been relatively flat, contributions from individual citizens have been growing dramatically. Candidates have become correspondingly more reliant on individual contributions. Barber reports that the median federal candidate now obtains 80% of her funds from individual donors, up from only 20% two decades ago. Moreover, Barber and Bonica have shown that individual contributors are far more ideological than are PACs. Consequently, candidates for federal and state office are now far more reliant on ideologically-motivated contributions than was the case in the 1990s.

Barber provides two important pieces of evidence that suggest that this rise in money from ideological individuals contributes substantially to polarization in legislatures. First, he finds that there is a significant correlation between the extremity of a legislator and the percentage of campaign funds raised from individuals. Although such a correlation is consistent with an impact of individual contributions on polarization, it is difficult to know which way to direct the causal arrow. Rather than ideological contributors forcing candidates to extreme positions, it might be the case that legislators that hold extreme positions for other reasons are simply better at raising money from individuals or that they are punished by organizational donors. But even if the donors are not causing the polarization, the success of extreme legislators in tapping into individual money can help sustain it.

Barber provides additional evidence which is more plausibly interpreted as indicating a causal relationship between reliance on individual contributors and polarization. He uses within-state variation in contribution limits on individuals and PACs.

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64 Michael J. Barber, Ideological Donors, Contribution Limits, and the Polarization of State Legislatures, TYPESCRIPT. BRIGHAM YOUNG UNIVERSITY (2014). Figure 1. The reliance of state candidates on individuals is 50%, also up from about 20% over the same period. See also Adam Bonica, Nolan McCarty, Keith T Poole, & Howard Rosenthal, Why Hasn't Democracy Slowed Rising Inequality?, J. ECON. PERSP. 27(3):103–23 (2013).


66 See Table 3 (measuring extremity as the absolute value of the DW-NOMINATE score for federal legislators and by the absolute value of the Shor-McCarty scores for state legislators).

67 His research design does not utilize cross-state variation in laws due to concerns
Such laws provide plausibly exogenous variation in the reliance of legislators on individual contributors. If a state has tight limits on individual contributors, Barber argues that candidates will be forced to seek funds from corporations, labor unions, and PACs, and vice versa.68

Barber shows that the fundraising portfolios of legislators are responsive to contribution limits—as individual limits are lowered, incumbents raise less money from individuals.69 But the most important finding is that legislators from states with high or no legal limits tend to have more extreme ideological positions, ceterus paribus. In a state that switches from unlimited individual contributions to one with limits, legislators will moderate by about a third of a standard deviation of the absolute values of the Shor-McCarty scores. The effect is considerably larger in the more professionalized state legislatures.

But while Barber’s results lend considerable support to arguments for tighter regulation of individual contributions, his findings about regulations on political action committees are almost the mirror image of those for individual contributions. Legislators are least polarized in states that have high or no limits on PAC contributions. Thus, the reform implications may be unsettling to some—clamp down on individuals but deregulate PACs.70

Tackling polarization through campaign finance reform involves a significant dilemma. As Bonica et al. shows, small donors are considerably more ideological and extreme than larger donors.71 While some large donors such as Charles Koch or George Soros have very clear ideological agendas, many wealthy contributors are more centrist and pragmatic and employ strategies similar to corporations. Smaller contributors,

68 See generally Barber, supra note 64.
69 Consistent with this finding, Barber also shows that tighter contribution limits lead to small contributions on average and more donors “maxing out” with a contribution at the legal limit.
70 Of course, there may be many reasons unrelated to polarization for tightening restrictions on corporate and labor union money.
71 Bonica et al., supra note 64, at 115, fig. 7.
however, are more likely to allocate their donations according to ideological criteria.\textsuperscript{72}

Yet at the same time, wealthy individuals have come to play an increasingly outsized role in campaign finance. Figure 12 (drawn from Bonica et al.) shows how campaign contributions have increasingly been concentrated at the top of the income distribution. The figure presents the proportion of contributions made by the top 0.01\% of American citizens in each election since the 1980s. In the 1980s, the top 0.01\% accounted for only 10 to 15\% of the total contributions in federal elections. In 2012, more than 4 out of every $10 in contributions came from one of these top donors. For comparison, the figure includes updates of the Piketty and Saez estimate of the income share of the 0.01\%. Growth in the concentration of campaign contributions has outstripped the spectacular growth of income inequality.

\textsuperscript{72} See Bonica, \textit{supra} note 64, at 115–16 & fig. 7.
Contribution and Income Shares of the Top 0.01%. Contribution data from Bonica et al. and income concentration data from Piketty and Saez updated to 2011. The dark line tracks the share of campaign contributions in all federal elections donated by the top 0.01 percent of the voting age population. The shaded line tracks the share of total income (including capital gains) received by the top 0.01 percent of households. The figure includes individual contributions to Super PACs and 527 organizations but excludes contributions to nondisclosing 501c(4) organizations, which are recorded to have spent approximately $143 million in 2010 and $318 million in 2012, much of which was raised from wealthy individuals. Were it possible to include contributions to nondisclosing 501c’s, the trend line would likely be 1–2 percentage points higher in 2010 and 2012.

Consequently, if reformers want to target polarization, small donors should be targeted at the expense of large donors. But those who wish to target an ever increasing source of political inequality should do the opposite.

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VI. CONCLUSIONS

Successful reforms must be based on a foundation of good evidence. My hope is that academic research will play a more central part in the debates about how to improve democracy and governance in the United States. Clearly, political scientists need to do more to engage and communicate our ideas and findings. My hope is that this article contributes to that endeavor.74

But sometimes it seems that input of social scientists is not always welcome. Those who tout certain reform ideas as solutions to polarization often respond to contradictory academic evidence in one of two ways. The first is to say “yes, but in the real world . . .”, to make an appeal to “common sense,” and to conclude with some personal or historical anecdote. It is hardly worth saying that this is a terrible approach to promoting fundamental reform of our democratic institutions. The mixture of social, economic, and strategic considerations that underly the creation of our partisan and ideological divisions are too complex to be reduced to simple stories and common sense.

The second response is to say “so what? Bipartisan redistricting commissions, non-partisan primaries, and curbs on corporate spending are good ideas independent of any effect on polarization.” Undoubtedly, it is true that there are good non-polarization arguments in favor of these and many other reforms. Those are the arguments that should be made. Marketing ideas on undeliverable benefits is surely the best way to undermine reform.

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