

The Realities of Electoral Reform

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What good are theories if they cannot be tested? Election law has wrestled with this question over the last generation. Two new theories have emerged during this period that reject conventional rights-and-interests balancing. In its place, the responsiveness theory asserts that legislators' positions should be sensitive to changes in the views of their constituents. Similarly, the alignment theory claims that voters' and legislators' preferences should be congruent.

Unfortunately, both of these theories share a common flaw: They provide no way for anyone to tell whether electoral policies improve or worsen responsiveness or alignment. They operate at too normative a level to be useful to practically minded courts or policymakers. They are caught in clouds of abstraction.

This Article is an attempt to pull the theories down from the clouds. In the last few years, data has become available, for the first time, on voters' and legislators' preferences at the state legislative level. We use this data to calculate responsiveness and alignment for both individual legislators and whole legislative chambers, across the country and over the last two decades. We also pair these calculations with a new database of state electoral policies that covers the areas of (1) franchise access, (2) party regulation, (3) campaign finance, (4) redistricting, and (5) governmental structure. This pairing enables us to estimate the policies' actual effects on responsiveness and alignment.

Our results mean that laws' representational impact now is a matter of empirics, not conjecture. Courts that wish to decide cases in accordance with the

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responsiveness or alignment theories may do so by consulting our findings. Policymakers who aim to enact beneficial reforms may do the same. And academics no longer have an excuse for debating the theories from a purely normative perspective. Now that the “is” has been intertwined with the “ought,” the “is” no longer may be ignored.

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I. INTRODUCTION

Two major theories of election law share a common flaw. They both assert that electoral policies should be assessed based on whether they promote or inhibit a certain kind of relationship between voters' and representatives' preferences. But neither theory offers any way to *tell* whether policies actually produce this relationship. Neither theory, that is, offers any practical guidance to courts or policymakers who wish to heed its recommendations.

Take the *responsiveness* theory that Sam Issacharoff and Rick Pildes pioneered, and that is now the dominant approach in the election

law literature.¹ The theory contends that officeholders' positions should be responsive to the views of their constituents. If the constituents' preferences shift in a particular direction, then so should the officeholders' preferences. But how are we supposed to know whether a given policy—a photo-identification requirement, say, or a limit on campaign contributions—increases or decreases responsiveness? How are we supposed to operationalize the value that Issacharoff and Pildes have identified? Unfortunately, the theory provides no answer.²

Or take the *alignment* theory that many political scientists endorse, and that one of us has applied to election law in earlier work.³ The theory argues that representatives' positions should be congruent with voters' views. If voters hold certain preferences, then so should their representatives. But how do we figure out whether a given reform—an open primary, say, or an independent redistricting commission—is aligning or misaligning? How do we convert the abstract ideal of preference congruence into usable instructions for judges and legislators? Again, alas, the theory comes up empty.

To be fair, this flaw in the responsiveness and alignment theories was unavoidable until very recently. To determine the effects of different electoral policies, it is necessary to have (1) substantial policy variation across time and space, (2) a measure of voters'

1. For some of the key articulations of the theory, see Samuel Issacharoff, *Gerrymandering and Political Cartels*, 116 HARV. L. REV. 593, 630 (2002); Samuel Issacharoff & Richard H. Pildes, *Politics as Markets: Partisan Lockups of the Democratic Process*, 50 STAN. L. REV. 643, 717 (1998); and Richard H. Pildes, *The Supreme Court, 2003 Term: Foreword: The Constitutionalization of Democratic Politics*, 118 HARV. L. REV. 29, 40 (2004). For a sense of the theory's centrality in the election law literature, see RICHARD L. HASEN, *THE SUPREME COURT AND ELECTION LAW* 139 (2003) ("The Issacharoff-Pildes model is becoming the new election law orthodoxy . . ."); Joseph Fishkin, *Equal Citizenship and the Individual Right to Vote*, 86 IND. L.J. 1289, 1290 (2011) (describing the "emerging consensus" in favor of the Issacharoff-Pildes approach); and Nathaniel Persily, *In Defense of Foxes Guarding Henhouses: The Case for Judicial Acquiescence to Incumbent-Protecting Gerrymanders*, 116 HARV. L. REV. 649, 651 (2002) (noting how "attention in the field has shifted . . . toward an emphasis on electoral competition").

2. Other scholars who have made this point include Yasmin Dawood, *The Antidomination Model and the Judicial Oversight of Democracy*, 96 GEO. L.J. 1411, 1423 (2008) ("[I]t is difficult to ascertain when the right level of partisan competition has been achieved.") and Daniel A. Farber, *Implementing Equality*, 3 ELECTION L.J. 371, 376 (2004) (observing that "structural considerations are difficult to manage").

3. See Nicholas O. Stephanopoulos, *Elections and Alignment*, 114 COLUM. L. REV. 283, 304 (2014); see also, e.g., Andrew Rehfield, *Representation Rethought: On Trustees, Delegates, and Gyroscopes in the Study of Political Representation and Democracy*, 103 AM. POL. SCI. REV. 214, 219 (2009) ("The reigning view within empirical political science presumes the delegate model of representation as the ideal."); Andrew Sabl, *Preference, Policies, and Democratic Quality: The Empirical-Normative Divide* 6 (Apr. 3, 2014) (unpublished paper) (on file with authors) (discussing many "empirical researchers asserting that democratic theory implies congruence").

preferences, and (3) a measure of legislators' preferences.⁴ At the congressional level, data on voters' and legislators' preferences has long been available, but there is insufficient policy variation to come to any robust conclusions. Too many rules are set federally and thus do not differ year by year or state by state.⁵ At the state legislative level, conversely, states have experimented with all sorts of electoral policies, but in the past there was little data on voters' or legislators' preferences. The districts were too small and the politicians too obscure for much information to be gathered.

This situation has changed dramatically over the past few years. As to voters' preferences, a pair of political scientists merged a series of surveys and then used a new statistical technique to produce public opinion estimates at the state legislative district level.⁶ One of us also compiled presidential election results aggregated by state legislative district for a substantial number of prior elections.⁷ As to legislators' preferences, another pair of political scientists assembled roll call voting data for all fifty states and then used this information to calculate state legislator ideal points.⁸ Still another political scientist estimated state legislators' ideologies by analyzing the identities of their campaign donors.⁹ Lastly, we perused an array of primary and secondary sources in order to code several dozen state electoral policies over a two-decade period. Our database, the most extensive of its kind, includes policies in the areas of (1) franchise access, (2) party regulation, (3) campaign finance, (4) redistricting, and (5) governmental structure.

Armed with this newly available data, we seek in this Article to redress the empirical deficiencies of the responsiveness and alignment theories. We seek, in other words, to determine what the implications of different electoral policies actually are for responsiveness and

4. It also is helpful to have a large number of cases to study. While there are only 435 congressional districts in the country, there are more than *seven thousand* state legislative districts—a much more suitable data universe for state-level analysis.

5. This is most true with respect to campaign finance and governmental structure policies.

6. See Chris Tausanovitch & Christopher Warshaw, *Measuring Constituent Policy Preferences in Congress, State Legislatures, and Cities*, 75 J. POL. 330, 330 (2013) (acquiring pool of 275,000 respondents by merging surveys).

7. This was Rogers. See Eric M. McGhee et al., *A Primary Cause of Partisanship? Nomination Systems and Legislator Ideology*, 58 AM. J. POL. SCI. 337, 341–47 (2014) (using this data).

8. See Boris Shor & Nolan McCarty, *The Ideological Mapping of American Legislatures*, 105 AM. POL. SCI. REV. 530, 532–49 (2011).

9. See Adam Bonica, *Mapping the Ideological Marketplace*, 58 AM. J. POL. SCI. 367, 368–82 (2014). However, as we discuss *infra* Part III.A, we are unable to use Bonica's estimates in our analysis because of their lower reliability at the state legislative level.

alignment. We carry out our analysis at the levels of both the state legislative district and the state legislative chamber. This dual approach allows us to investigate both *dyadic* representation (i.e., the relationship between a particular legislator and her constituents) and *collective* representation (i.e., the relationship between an entire legislative body and all of the voters in the state).¹⁰ We also carry out our analysis over the 1992–2013 period and across all fifty states.¹¹ This wide temporal and spatial lens takes full advantage of the states' policy variation and enhances our ability to reach conclusions about causality.

At the dyadic level, we find that most state legislators are misaligned with their constituents. Democrats typically are too liberal for their districts' voters, while Republicans typically are too conservative. This misalignment also is asymmetric. Republicans tend to be more misaligned than Democrats, and their level of misalignment has risen in recent years (while that of Democrats has fallen). At the collective level, both alignment and responsiveness vary markedly from state to state, but not very much from year to year. The median legislator also is too liberal in states governed by Democrats, and too conservative in Republican-run states. And the median legislator is positively responsive to changes in public opinion in most states, but swings in the *opposite* direction from the electorate in a handful of outliers.

Turning to the electoral policies that are the Article's focus, we find that several of them have positive effects on alignment and responsiveness, even with rigorous controls included in our models. For example, limits on individual campaign contributions improve alignment at the district level, likely because the donors whose giving is constrained tend to be ideologically extreme. Similarly, the use of an independent commission to draw district lines improves alignment at the *chamber* level, probably because a commission (unlike politicians) has no incentive to gerrymander. And sore loser laws, which ban candidates who lose in the primaries from running again in the general election, improve alignment at both the district and chamber levels. This effect may arise due to defeated candidates seeking a second bite at the apple, and thus splitting their party's vote, in the absence of these laws.

However, the story is not as rosy for all of the policies we examine. For instance, certain types of open primaries worsen both

10. See Robert Weissberg, *Collective vs. Dyadic Representation in Congress*, 72 AM. POL. SCI. REV. 535, 535–37 (1978).

11. The one minor exception is that we study only chamber-level responsiveness in Nebraska, since its legislators do not have official partisan affiliations.

alignment and responsiveness, likely because they fail to attract more moderate voters to the polls. Likewise, public financing schemes are misaligning at the district level, probably because the public funds tend to be tied to donations from polarized individual donors. Term limits also reduce district-level alignment, as term-limited legislators evidently represent their constituents less ably. And policies that restrict access to the franchise (such as photo-identification requirements) have little discernible impact on alignment. They may influence *turnout*, but they do not seem to affect *representation*.

Our findings have important implications for courts, policymakers, and academics alike. Courts, first, may consult our results to evaluate claims that policies should be upheld because they promote alignment or responsiveness.¹² Courts have struggled with these claims in the past, but now arguments about how policies affect representation may be assessed empirically rather than intuitively. Our findings also bolster certain judicial doctrines while undermining others. For example, courts' tendency to uphold franchise restrictions¹³ seems acceptable given their minor impact on alignment; and courts' aggressive scrutiny of open primaries¹⁴ may be sensible too given their negative effects on alignment and responsiveness. But courts should be more tolerant of limits on individual donors,¹⁵ which increase alignment, and should prod states more forcefully to adopt redistricting commissions,¹⁶ which are aligning as well.

Next, policymakers who hope to improve representation may draw on our results to identify policies that serve this goal (and to avoid policies that do not). The areas in which representational gains are most attainable, in our view, are campaign finance and redistricting.¹⁷ Several reforms in these areas produce benefits in both district- and

12. For a discussion of Supreme Court cases that address alignment, see Stephanopoulos, *supra* note 3, at 316–20. For a similar discussion focused on responsiveness, see Issacharoff, *supra* note 1, at 605–06.

13. See, e.g., Crawford v. Marion Cnty. Election Bd., 553 U.S. 181, 204 (2008) (plurality opinion) (upholding Indiana photo-identification requirement).

14. See, e.g., Cal. Democratic Party v. Jones, 530 U.S. 567, 586 (2000) (voiding California blanket primary).

15. Instead, the Court has struck down limits on individual expenditures, see Buckley v. Valeo, 424 U.S. 1, 58–59 (1976), on aggregate individual contributions, see McCutcheon v. FEC, 134 S. Ct. 1434, 1462 (2014) (plurality opinion), and on certain nonaggregate individual contributions, see Randall v. Sorrell, 548 U.S. 230, 262–63 (2006).

16. Instead, the Court has upheld egregious gerrymanders enacted by the elected branches. See, e.g., League of United Latin Am. Citizens v. Perry, 548 U.S. 399, 447 (2006) (rejecting “challenge to Texas’s redistricting as an unconstitutional political gerrymander”); Vieth v. Jubelirer, 541 U.S. 267, 305 (2004) (holding political gerrymandering challenge against Pennsylvania nonjusticiable).

17. Sore loser laws also are aligning, but they already are in place in most states.

chamber-level alignment. These reforms should be a high priority for leaders who want American democracy to function more effectively. Conversely, there is less reason for these leaders to devote their energies to franchise access, party regulation, or governmental structure. Most franchise access laws only influence representation at the margins, while several common reforms of party regulation and governmental structure are *misaligning*. In these areas, inaction, or even the repeal of existing rules, is preferable to new regulatory activity.¹⁸

Lastly, our analysis gives rise to both a research agenda for political scientists and theoretical insights for legal academics. Among the many worthwhile sequels that political scientists should consider are: generating reliable measures of legislator ideology that vary over time, coding electoral policies in nonbinary fashion, and using voter surveys to place voters' and state legislators' ideal points on the same scale. Law professors tend not to perform such quantitative work, but our results also should be valuable to them due to the light they shed on the alignment and responsiveness theories. For one thing, it now is possible to *apply* the theories—to determine with some confidence how different policies affect representation. This is a major milestone in the theories' evolution. For another, it turns out that the responsiveness theory is much less useful in practice than the alignment theory. Far fewer policies have any impact on responsiveness, meaning that it usually cannot be used to distinguish sound from unsound reforms.

The Article proceeds as follows. Part II provides the theoretical backdrop for our empirical investigation. It articulates the responsiveness and alignment theories, summarizes the existing literature on the theories, and identifies certain gaps in this literature. Part III, the analytical core of the Article, presents our findings on the effects of different electoral policies on responsiveness and alignment. It describes the data we use, explains our methodological choices, and sets forth the results of our various models. Lastly, Part IV considers what our conclusions mean for courts, policymakers, and academics. It argues that all three sets of actors must rethink their approaches to election law if they hope to construct a responsive and aligned political system.

One more prefatory note: This Article is far from the last word on how electoral policies affect representation. In fact, it is more like the first word. All of the datasets we rely on are very new and surely will be refined in the future. In addition, a single paper cannot possibly

18. We decline to comment on what reforms should be pursued by policymakers who affirmatively *want* misalignment in their favor.

assess with sufficient rigor several dozen policies spanning five distinct areas. We believe our analytical techniques are valid and generate reliable results. We also believe there is value in breadth of coverage, in seeking to evaluate simultaneously a range of reforms. But we recognize that more work is necessary before our findings can be seen as definitive and not merely suggestive. In fact, we plan to do a good deal of this work ourselves as we continue to execute the project that this Article commences.

II. THEORETICAL BACKDROP

Before delving into empirics, it is important to say a few words about the election law theories whose weaknesses we hope to rectify. We open this Part, then, by outlining the key elements of the responsiveness and alignment theories. Both theories are *structuralist*, in the argot of election law scholars, because they emphasize structural features of our political system rather than individual rights claims. Both theories are concerned as well with achieving a certain kind of relationship between voters' and representatives' preferences—a *responsive* relationship in one case and a *congruent* relationship in the other.

Next, we summarize the existing political science literature on the impact of different electoral policies on responsiveness and alignment. A number of studies do attempt to quantify these concepts and to analyze their linkages to electoral rules. Unfortunately, as we further explain in this Part, most of these efforts are deficient in significant respects. Very few studies to date have succeeded in measuring *both* voters' and representatives' preferences at the level—the state legislative—at which the greatest policy variation arises. As a result, current scholarship does not provide courts and policymakers with the necessary tools to operationalize the responsiveness and alignment theories.

A. Responsiveness and Alignment

In recent years, the central cleavage in election law has pitted *rights-oriented* against *structuralist* theories.¹⁹ In one camp are scholars who argue (along with some Supreme Court Justices) that the rights burdens imposed by electoral regulations should be balanced

19. For some of the abundant literature on this cleavage, see HASEN, *supra* note 1; Guy-Uriel Charles, *Judging the Law of Politics*, 103 MICH. L. REV. 1099 (2005) (reviewing HASEN, *supra* note 1); Dawood, *supra* note 2; Fishkin, *supra* note 1; and Richard H. Pildes, *The Theory of Political Competition*, 85 VA. L. REV. 1605 (1999).

against the state interests that the regulations serve.²⁰ The burdens should be permitted only if they are less substantial than the gains for the countervailing interests. In the opposite corner are commentators who maintain that such rights-and-interests balancing ignores the structural dynamics that are truly at stake in electoral disputes.²¹ These dynamics, summarized by Pildes as “the interlocking relationships of the institutions . . . that organize the democratic system,”²² should be the focus of judges as well as legislators.

The responsiveness and alignment theories that are the subject of this Article both are structuralist approaches.²³ Both call attention to democratic values that inhere in our political system as a whole, not to individual rights such as speech or the franchise. To determine whether a given policy is lawful or advisable, the theories advise that its implications for the relevant democratic value be ascertained. Its implications for individual rights—or for state interests unconnected to the democratic value—are irrelevant.

Beginning with the responsiveness theory, some readers may be puzzled by our label for it. Issacharoff and Pildes, the chief proponents of the theory, are best known for their commitment to electoral competition, not responsiveness. But they have made clear in numerous works that they view competition as an instrumental rather than an intrinsic value. The *reason* why they regard competition as desirable is their belief that it tends to produce a responsive political order. Responsiveness, not competition, is their ultimate aim. As they write in a seminal article, “Only through an appropriately competitive partisan environment can one of the central goals of democratic politics be realized: that . . . the political process be responsive to the interests and views of citizens.”²⁴

20. See Stephanopoulos, *supra* note 3, at 292–95 (describing these scholars and Justices as well as their arguments).

21. See *id.* at 295–98 (describing these commentators and their arguments).

22. Pildes, *supra* note 1, at 41.

23. See, e.g., Pildes, *supra* note 19, at 1607 (“Professor Samuel Issacharoff and I attempt to . . . develop[] one structural aim that the history of American law and democracy suggests should be a particular focal point for courts.”); Stephanopoulos, *supra* note 3, at 299 (“Alignment is a quintessential structural value—a value that matters to the entire polity, not to any particular group or individual . . .”).

24. Issacharoff & Pildes, *supra* note 1, at 646; see also, e.g., Issacharoff, *supra* note 1, at 615 (“[C]ompetition [is] critical to the ability of voters to ensure the responsiveness of elected officials to the voters’ interests . . .”); Pildes, *supra* note 1, at 125 (describing as a key question for American politics whether “parties will face sufficient competitive pressures to keep them appropriately responsive to diverse interests”).

The other democratic value that Issacharoff and Pildes believe is advanced by competition is accountability. See, e.g., Issacharoff, *supra* note 1, at 623 (“[D]emocracy is defined primarily by the accountability of the elected to the electors, an accountability that is in turn

Unfortunately, Issacharoff and Pildes are not always clear as to which output should be responsive to which input at which level. On the output side, they refer at different times to elected officials' "preferences,"²⁵ to "policy outcomes,"²⁶ and to "representation" itself.²⁷ On the input side, similarly, they mention the "interests of voters"²⁸ on some occasions and the "preferences of the electorate" on others.²⁹ And with respect to level, sometimes they argue that individual legislators should be responsive to their own constituents,³⁰ and elsewhere they claim that the entire political system should be responsive to all of the voters in the jurisdiction.³¹ Probably the fairest reading of their position is that they want all of these outputs to be responsive to all of these inputs at all of these levels. Legislators' preferences *and* policy outcomes should be responsive to voters' preferences *and* interests within particular districts *and* whole jurisdictions.

In contrast to the responsiveness theory, the alignment theory is not concerned with the rate of change of some output given a shift in some input. Instead, the theory asserts that the *levels* of the input and of the output should correspond. At any moment in time, notwithstanding whatever swings have occurred or will occur, the input and the output should assume the same value along some common metric.³² (Of course, this means that alignment and responsiveness are

shaped through competitive elections."); Richard H. Pildes, *Competitive, Deliberative, and Rights-Oriented Democracy*, 3 ELECTION L.J. 685, 688 (2004) ("[O]f the various structural goals of democracy, the one courts ought to focus on is ensuring competition and, through it, electoral accountability."). We do not attempt to measure accountability in this Article.

25. Issacharoff, *supra* note 1, at 615, 628 n.139.

26. Issacharoff & Pildes, *supra* note 1, at 646.

27. *Id.* at 649, 673.

28. *Id.* at 680.

29. Issacharoff, *supra* note 1, at 615.

30. See, e.g., *id.* at 615–16; Pildes, *supra* note 24, at 686 ("Elections also create ex ante incentives for political candidates to be strategically responsive to enough voters to enable candidates to turn themselves into officeholders . . .").

31. See, e.g., Issacharoff & Pildes, *supra* note 1, at 646 (noting that legislatures can be viewed "as a managerial class, imperfectly accountable through periodic review to a diffuse body of equity holders known as the electorate"); Pildes, *supra* note 1, at 42, 64 n.158.

32. See Stephanopoulos, *supra* note 3, at 301; see also, e.g., Jeffrey R. Lax & Justin H. Phillips, *The Democratic Deficit in the States*, 56 AM. J. POL. SCI. 148, 148 (2012) ("[B]y responsiveness, we mean a positive correlation between opinion and policy; by congruence, we mean that policy actually matches majority opinion."); Boris Shor, *Congruence, Responsiveness, and Representation in American State Legislatures 2* (Aug. 25, 2014) (unpublished paper) available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1697352, archived at <http://perma.cc/GCT9-GNUT> (noting that responsiveness "denotes the idea that legislators . . . respond to their constituents' policy preferences" while congruence requires that "the preferences of constituents and the representative should match in some common metric").

related. A degree of responsiveness is necessary to achieve alignment whenever an input changes.³³)

At least as one of us has articulated it, the alignment theory offers a good deal of specificity as to which outputs should align with which inputs at which levels.³⁴ In increasing order of ambitiousness, the relevant outputs are (1) legislators' partisan affiliations, i.e., the party to which they belong; (2) legislators' policy preferences, i.e., their specific issue positions and overall ideologies; and (3) public policy outcomes, i.e., the actual enactments of the elected branches. Also in increasing order, the relevant inputs are (1) voters' partisan preferences, i.e., the party they would like to see in office; and (2) voters' policy preferences, i.e., their specific issue positions and overall ideologies. And alignment can be conceptualized at the levels of (1) the individual district, in which the district's representative and median voter should align; and (2) the entire legislative chamber, in which the body's median member and the jurisdiction's median voter should do so.

Putting these pieces together, we can construct a taxonomy of alignment.³⁵ *Partisan alignment* refers to the congruence of legislators' partisan affiliations and voters' partisan preferences. Policy preference alignment (*preference alignment* for short) denotes the correspondence of legislators' and voters' policy positions. And policy outcome alignment (*outcome alignment* for short) means that public policy outcomes correspond to voters' policy views. Moreover, all three types of alignment apply to the levels of both the individual district and the entire legislative chamber. (Though outcome alignment at the district level is essentially irrelevant since so little policy is set by individual constituencies.)

As we explain below,³⁶ we choose to focus on preference alignment in this Article, at both the district and chamber levels. No single project could possibly analyze how all of the forms of alignment are related to all of the electoral rules that shape our political system. Because of the imprecision of Issacharoff and Pildes's account, we also apply the taxonomy of alignment to responsiveness. We thus assess

33. See Stephanopoulos, *supra* note 3, at 301 n.81.

34. See *id.* at 304–13.

35. See *id.* Careful readers may note that our terminology is slightly different here than in Stephanopoulos's earlier work. What he previously called "policy alignment" we now refer to as "preference alignment."

36. See *infra* Part II.C. Of course, preference alignment is *related* to partisan alignment and outcome alignment. Because each party's legislators usually hold similar ideologies, partisan alignment tends to lead to preference alignment. Similarly, because the median legislator is often the *pivotal* legislator for purposes of policy enactment, preference alignment tends to lead to outcome alignment. See Stephanopoulos, *supra* note 3, at 310–11.

preference responsiveness—the rate of change of legislators’ policy positions given shifts in voters’ policy views—at the chamber level. Furthermore, we typically (though not exclusively³⁷) use the median voter as our benchmark on the input side. We recognize that other figures are normatively appealing too (such as the median *person*, the median *citizen*, and the median *eligible voter*), but space and data constraints prevent us from exploring here how well they are represented.³⁸ While our methodological decisions exclude several kinds of alignment and responsiveness from our study, we trust that our findings still will be of substantial interest.

B. Prior Findings

Not surprisingly, the scholars who have advanced the responsiveness and alignment theories have not themselves investigated which electoral policies promote these values and which do not. The scholars have drawn ably from the relevant academic literature and historical record, but they have not carried out their own empirical analysis. Democratic theory and quantitative inquiry seldom mix.

However, a number of political scientists *have* explored the links between electoral rules and the various kinds of responsiveness and alignment. We summarize their findings here and critique them in the next section. For the sake of simplicity, we organize our discussion by the category of the rule: (1) *franchise access*, i.e., policies relating to the ability to vote; (2) *party regulation*, i.e., policies relating to parties’ nominee selection and ballot access; (3) *campaign finance*, i.e., policies relating to campaign contributions and expenditures; (4) *redistricting*, i.e., policies relating to the drawing of electoral districts; and (5) *governmental structure*, i.e., policies relating to the organization of the elected branches. These categories capture essentially all of the rules that constitute states’ electoral systems.

Starting with access to the franchise, several studies have examined the consequences of restrictive policies for the partisan composition of the electorate—a plausible proxy for partisan

37. See *infra* Part III.C.2 (using median citizen as benchmark in franchise access analysis).

38. See Stephanopoulos, *supra* note 3, at 304–13 (noting appeal of some of these figures). The median voter also strikes us as a less controversial benchmark than some of the other figures mentioned in Stephanopoulos’s earlier work, such as the median eligible voter who would have voted in the absence of a franchise restriction, see *id.* at 325, or the median hypothetical voter exposed to more event campaign spending, see *id.* at 338.

alignment.³⁹ Photo-identification laws, for example, result in a pro-Republican swing of 0–1% because their bite is felt (a bit) more acutely by Democratic supporters.⁴⁰ Likewise, the elimination of same-day registration produces a pro-Republican swing of about 5% because Democrats are more likely to take advantage of the policy where it is available.⁴¹ On the other hand, the elimination of early voting produces a pro-Democratic swing of about 5% because Republicans are more inclined to cast their ballots ahead of Election Day.⁴² And early closing dates for voter registration and purges of voter rolls apparently do not skew the electorate in either party's favor (though they do reduce turnout).⁴³

Second, a good deal of work has investigated whether the type of primary that a state holds—the highest-profile category of party regulation—is connected to the positions that politicians adopt.⁴⁴ Some scholars have found that more inclusive primaries (i.e., primaries in which more voters are allowed to participate) benefit candidates with

39. The proxy is plausible because if a franchise restriction alters the partisan composition of the electorate, then the median *actual* voter diverges from the median *eligible* voter who would have participated in the absence of the restriction. *See id.* at 325–26.

40. *See* Nate Cohn, *Finally, Real Numbers on Voter ID*, NEW REPUBLIC (July 22, 2013), <http://www.newrepublic.com/article/113986/voter-id-north-carolina-law-hurts-democrats>, archived at <http://perma.cc/3MV9-FQW3> (estimating that Obama's share of the 2012 general election vote in North Carolina would have dropped 0.3% had a photo ID law been in place); Brad T. Gomez, Uneven Hurdles: The Effect of Voter Identification Requirements on Voter Turnout 19 (April 2008) (unpublished paper), available at http://myweb.fsu.edu/bgomez/Gomez_VoterID_2008.pdf, archived at <http://perma.cc/T44B-ERNZ> (“[I]n states with photographic identification requirements, the Republican Party does experience a slight (but significant) increase in vote share.”); Nate Silver, *Measuring the Effects of Voter Identification Laws*, FIVETHIRTYEIGHT (July 15, 2012 9:28 AM), <http://fivethirtyeight.blogs.nytimes.com/2012/07/15/measuring-the-effects-of-voter-identification-laws/>, archived at <http://perma.cc/5VEL-86ZM> (estimating effect of a photo ID law to be a 0.4–1.2% net swing to the Republican candidate in various states).

41. *See* Timothy Besley & Anne Case, *Political Institutions and Policy Choices: Evidence from the United States*, 41 J. ECON. LIT. 7, 27 (2003); Barry C. Burden et al., *Election Laws and Partisan Gains: The Effects of Early Voting and Same Day Registration on the Parties' Vote Shares?* 8 (2013) (on file with authors).

42. *See* Burden et al., *supra* note 41, at 8.

43. *See* Glenn E. Mitchell & Christopher Wlezien, *The Impact of Legal Constraints on Voter Registration, Turnout, and the Composition of the American Electorate*, 17 POL. BEHAVIOR 179, 186, 195 (1995). Furthermore, studies have found that felon disenfranchisement laws are harmful to Democrats, though they have not quantified the magnitude of the pro-Republican swing. *See, e.g.,* Christopher Uggen & Jeff Manza, *Democratic Contraction? Political Consequences of Felon Disenfranchisement in the United States*, 67 AM. SOC. REV. 777, 786–89 (2002).

44. One study also has examined the implications of sore loser laws—provisions barring candidates defeated in primaries from running again in the general election—for politicians' policy stances. *See* Barry C. Burden et al., *Sore Loser Laws and Congressional Polarization*, 39 LEGIS. STUD. Q. 299, 301–19 (2014). The study found that the laws are linked to greater extremism among both congressional candidates and representatives, and thus contribute to legislative polarization. *See id.* at 319–21.

more moderate stances, thus potentially boosting preference alignment.⁴⁵ Other scholars, including two of us, have concluded that primary type is largely unrelated to legislative polarization.⁴⁶ In this literature, several studies measure voters' as well as legislators' preferences, typically including the former as controls in their models.⁴⁷ One noteworthy study conducted a survey of California voters, quantified voters' and legislators' preferences on the same scale, and then compared the responsiveness and alignment of the state's U.S. House members before and after the 2012 adoption of the top-two primary.⁴⁸ The study found that the reform did not produce improvement along either metric.⁴⁹

Third, numerous studies have tested whether campaign finance regulations influence the partisan composition of the electorate or of the legislature.⁵⁰ If the regulations have such an effect, they may shift partisan alignment relative to a regime of unrestricted contributions

45. See, e.g., Will Bullock & Joshua D. Clinton, *More a Molehill than a Mountain: The Effects of the Blanket Primary on Elected Officials' Behavior from California*, 73 J. POL. 915, 923 (2011); Elisabeth R. Gerber & Rebecca B. Morton, *Primary Election Systems and Representation*, 14 J.L. ECON. & ORG. 304, 313 (1998); Kristin Kanthak & Rebecca Morton, *The Effects of Electoral Rules on Congressional Primaries*, in CONGRESSIONAL PRIMARIES AND THE POLITICS OF REPRESENTATION 116, 126 (Peter F. Galderisi et al. eds., 2001); Christopher Westley et al., *Primary Election Systems and Candidate Deviation*, 30 E. ECON. J. 365, 371 (2004).

46. See, e.g., McGhee et al., *supra* note 7, at 342–47; Thad Kousser et al., *Reform and Representation: Assessing California's Top-Two Primary and Redistricting Commission 25* (2013) (unpublished paper), available at <http://www.columbia.edu/~jhp2121/workingpapers/ReformAndRepresentation.pdf>, archived at <http://perma.cc/N8EY-VRLM>.

47. See, e.g., Bullock & Clinton, *supra* note 45, at 922; Gerber & Morton, *supra* note 45, at 314–18; McGhee et al., *supra* note 7, at 342.

48. See Kousser et al., *supra* note 46, at 4–26. In a top-two primary, all candidates are listed on the same ballot, and all voters may cast a ballot for the candidate of their choice (of whatever party). The two candidates with the most votes, irrespective of party, then advance to the general election.

49. See *id.* at 22–23.

50. Another set of studies examines whether campaign finance regulations promote competitiveness, which itself may be correlated with responsiveness. This work typically finds that regulations *do* make races somewhat more competitive. See, e.g., Neil Malhotra, *The Impact of Public Financing on Electoral Competition: Evidence from Arizona and Maine*, 8 ST. POL. & POL'Y Q. 263, 274–77 (2008); David M. Primo et al., *State Campaign Finance Reform, Competitiveness, and Party Advantage in Gubernatorial Elections*, in THE MARKETPLACE OF DEMOCRACY: ELECTORAL COMPETITION AND AMERICAN POLITICS 269, 278 (Michael P. McDonald & John Samples eds., 2006); Thomas Stratmann & Francisco J. Aparicio-Castillo, *Competition Policy for Elections: Do Campaign Contribution Limits Matter?*, 127 PUB. CHOICE 177, 199 (2006). For a more extensive discussion of how campaign finance regulations affect alignment, see Nicholas O. Stephanopoulos, *Aligning Campaign Finance Law*, 101 VA. L. REV. (forthcoming 2015) (manuscript at 42–48).

and expenditures.⁵¹ Corporate spending bans, then, result in Democratic candidates winning 1–6% more seats in state legislatures.⁵² Corporate *contribution* limits produce a pro-Democratic seat swing of about 2% in state senates.⁵³ Other types of contribution limits apparently have no impact on candidates' vote margins in gubernatorial races.⁵⁴ But higher individual contribution limits give rise to more extreme voting records by state legislators (because individual donors themselves are quite extreme).⁵⁵ Conversely, higher limits on donations by political parties⁵⁶ and political action committees ("PACs")⁵⁷ are linked to more centrist voting records (because parties and PACs are relatively moderate). Higher individual limits thus may reduce preference alignment while higher party and PAC limits may increase it.⁵⁸

51. The misalignment that may occur here is the divergence between the median actual voter and the median hypothetical voter exposed to more even outlays. See Stephanopoulos, *supra* note 3, at 338–39.

52. See Andrew B. Hall, Systemic Effects of Campaign Spending 28 (Mar. 24, 2013) (unpublished manuscript), available at <http://ssrn.com/abstract=2120637>, archived at <http://perma.cc/UT4H-AZSS>; Tilman Klumpp et al., *Money Talks: The Impact of Citizens United on State Elections* 9 (Univ. of Alta., Faculty of Arts, Dep't of Econ., Working Paper No. 2012-18, 2012), available at <http://uofa.ualberta.ca/-/media/arts/departments-institutes-and-centres/economics/wps/WP2012-18-Klumpp-Mialon-Williams>, archived at <http://perma.cc/4LEV-XYAR>.

53. See Besley & Case, *supra* note 41, at 27.

54. See DONALD A. GROSS & ROBERT K. GOIDEL, THE STATES OF CAMPAIGN FINANCE REFORM 81 (2003); Primo et al., *supra* note 50, at 279.

55. See Michael Barber, *Ideological Donors, Contribution Limits, and the Polarization of State Legislatures* 4, 25, 37 (Sept. 4, 2013) (unpublished manuscript) (on file with authors).

56. See Raymond J. La Raja & Brian F. Schaffner, Do Party-Centered Campaign Finance Laws Increase Funding for Moderates and Challengers? 19–20 (Jan. 8–11, 2014) (unpublished manuscript), available at https://polsci.umass.edu/uploads/profiles/sites/la-raja_ray/SPSA-LaRaja-Schaffner-Parties.pdf, archived at <https://perma.cc/H4JC-U73B> (finding that parties are more likely to give money to candidates in competitive races, who are more likely to be moderate); Ray La Raja & Brian Schaffner, *Want to Reduce Polarization? Give Parties More Money*, WASH. POST MONKEY CAGE BLOG (July 21, 2014), <http://www.washingtonpost.com/blogs/monkey-cage/wp/2014/07/21/want-to-reduce-polarization-give-parties-more-money/>, archived at <http://perma.cc/E5HQ-MGAW>.

57. See Barber, *supra* note 55, at 4, 37; see also Adam Bonica, *Ideology and Interests in the Political Marketplace*, 57 AM. J. POL. SCI. 294, 295–98 (2013) (also finding that PACs are relatively moderate).

58. Another group of studies investigates whether “clean money” public financing systems affect levels of polarization. They find that these systems either have no impact or in fact are polarizing. See Jeffrey J. Harden & Justin H. Kirkland, *Do Campaign Donors Influence Polarization? Evidence from Public Financing in the American States* LEGIS. STUD. Q. (forthcoming) (manuscript at 27) (finding negligible impact); Seth E. Maskett & Michael G. Miller, *Does Public Election Funding Create More Extreme Legislators? Evidence from Arizona and Maine*, 15 STATE POL. & POL'Y Q. 24 (2015) (finding no impact); Andrew B. Hall, *How the Public Funding of Elections Increases Candidate Polarization* 19 (Aug. 13, 2014) (unpublished manuscript), available at https://dl.dropboxusercontent.com/u/11481940/Hall_publicfunding.pdf, archived at <https://perma.cc/CZP6-9BX8> (finding polarization).

Fourth, a substantial literature, to which we have contributed in prior work, examines the implications of redistricting institutions and criteria for partisan bias and electoral responsiveness. (Partisan bias refers to the divergence in the share of seats that each party would win given the same share of the statewide vote.⁵⁹ Electoral responsiveness denotes the rate at which a party gains or loses seats given changes in its statewide vote share.⁶⁰) As to institutions, we have found that California's new commission specifically,⁶¹ and redistricting commissions generally,⁶² produce declines in bias and gains in responsiveness. Work by other scholars, analyzing both American and foreign commissions, confirms our findings.⁶³ As to criteria, one of us has found that compactness worsens both bias and responsiveness,⁶⁴ that respect for political subdivisions improves responsiveness but worsens bias,⁶⁵ and that respect for communities of interest has varying effects depending on how it is measured.⁶⁶ Again, work by other scholars corroborates the mixed record of line-drawing requirements.⁶⁷

59. See, e.g., Andrew Gelman & Gary King, *Enhancing Democracy Through Legislative Redistricting*, 88 AM. POL. SCI. REV. 541, 545 (1994); Bernard Grofman & Gary King, *The Future of Partisan Symmetry as a Judicial Test for Partisan Gerrymandering After LULAC v. Perry*, 6 ELECTION L.J. 2, 8 (2007).

60. See, e.g., Gelman & King, *supra* note 59, at 542, 544; Grofman & King, *supra* note 59, at 9.

61. See Vladimir Kogan & Eric McGhee, *Redistricting California: An Evaluation of the Citizens Commission Final Plans*, 4 CAL. J. POL. & POL'Y 1, 22–24 (2012) (displaying seat-vote curves indicating that commission-drawn plans are less biased and more responsive than prior plans).

62. See Nicholas O. Stephanopoulos, *The Consequences of Consequentialist Criteria*, 3 U.C. IRVINE L. REV. 669, 710–15 app. tbls.2–5 (2014) (finding that commission usage reduces efficiency differential in state legislative elections and increases responsiveness in congressional elections); see also *id.* (finding that court usage also improves both partisan fairness and responsiveness).

63. See, e.g., Gelman & King, *supra* note 59, at 543, 549, 552 (American); Simon Jackman, *Measuring Electoral Bias: Australia, 1949–93*, 24 BRIT. J. POL. SCI. 319, 345, 350 (1994) (Australian); Ian Siaroff, *Electoral Bias in Quebec Since 1936*, 4 CAN. POL. SCI. REV. 62, 66–67 (2010) (Canadian); Bruce E. Cain et al., *Redistricting and Electoral Competitiveness in State Legislative Elections* 13 (Apr. 13, 2007) (unpublished manuscript), available at http://citation.allacademic.com/meta/p_mla_apa_research_citation/1/9/6/9/5/pages196951/p196951-1-1.php, archived at <http://perma.cc/6YVN-39FY> (American).

64. See Stephanopoulos, *supra* note 62.

65. See *id.*

66. Compare *id.* (finding that respect for communities of interest has little effect on bias or responsiveness), with Nicholas O. Stephanopoulos, *Spatial Diversity*, 125 HARV. L. REV. 1903, 1944–48, 1963–66 (2012) (finding that spatial diversity, a proxy for district-community congruence, is linked to improvements in district-level representation and plan-level bias and responsiveness).

67. See, e.g., Jowei Chen & Jonathan Rodden, *Unintentional Gerrymandering: Political Geography and Electoral Bias in Legislatures*, 8 Q.J. POL. SCI. 239, 260–64 (2013) (finding that randomly drawn plans with compact districts tend to favor Republicans); Richard Forgette et al., *Do Redistricting Principles and Practices Affect U.S. State Legislative Electoral Competition?*, 9 ST. POL. & POL'Y Q. 151, 162–63 (2009) (finding that certain criteria increase competitiveness in

Finally, a range of studies have looked into how aspects of governmental structure, in particular the voter initiative, shape the relationship between public opinion and actual public policy. The literature on the initiative is inconclusive, with some studies finding that its availability makes policy more responsive to and aligned with the public's views,⁶⁸ and other studies concluding that it has no such impact.⁶⁹ Despite their divergent results, these studies all employ similar methodologies, using survey data to estimate public opinion and legislative enactments to measure public policy.⁷⁰ The same approach has been exploited by a handful of very recent studies to evaluate two additional structural policies: the presence of term limits and the professionalism of state legislatures. These works' findings are mixed as well, though they do hint that the policies may improve representation.⁷¹

Of course, this brief review does not exhaust the literature on electoral policies and their consequences. But it should convey, at least in broad strokes, the questions that scholars have sought to answer, the techniques they have used, and the results of their investigations. In our view, the existing academic work is impressive in many respects, but it largely fails to assess preference responsiveness and alignment, especially with respect to electoral rules that vary only at the state

state legislative races while others do not); Richard Forgette & Glenn Platt, *Redistricting Principles and Incumbency Protection in the U.S. Congress*, 24 POL. GEOGRAPHY 934, 946 (2005) (same with respect to incumbent party vote share in congressional elections).

68. See, e.g., Kevin Arcenaux, *Direct Democracy and the Link Between Public Opinion and State Abortion Policy*, 2 ST. POL. & POL'Y Q. 372, 380–82 (2002); Barry C. Burden, *Institutions and Policy Representation in the States*, 5 ST. POL. & POL'Y Q. 373, 384–85 (2005); Elisabeth R. Gerber, *Legislative Response to the Threat of Popular Initiatives*, 40 AM. J. POL. SCI. 99, 117–24 (1996); John G. Matsusaka, *Popular Control of Public Policy: A Quantitative Approach*, 5 Q.J. POL. SCI. 133, 145–46 (2010). Matsusaka also investigates the influence of several of the electoral policies discussed above on outcome alignment, finding no effect in most cases. See Matsusaka, *supra*, at 152–58.

69. See, e.g., Edward L. Lascher, Jr., *Gun Behind the Door: Ballot Initiatives, State Policies, and Public Opinion*, 58 J. POL. 760, 769 (1996); Lax & Phillips, *supra* note 32, at 160–62; James Monogan et al., *Public Opinion, Organized Interests, and Policy Congruence in Initiative and Noninitiative U.S. States*, 9 ST. POL. & POL'Y Q. 304, 312–19 (2009); Chris Tausanovitch & Christopher Warshaw, *Representation in Municipal Government*, 108 AM. POL. SCI. REV. (forthcoming 2015) (manuscript at 23) (on file with authors) (finding no relationship); Devin Caughey & Christopher Warshaw, *Dynamic Representation in the American States, 1960–2012*, at 23 (MIT Pol. Sci. Dep't Research Paper No. 2014-22, Aug. 24, 2014), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2455441, archived at <http://perma.cc/N9Q8-NBWW>; Boris Shor, *supra* note 32, at 23.

70. The one exception is Shor, *supra* note 32, who studies preference alignment at the chamber level, albeit cross-sectionally.

71. See Lax & Phillips, *supra* note 32, at 160–62 (finding positive effects); Tausanovitch & Warshaw, *supra* note 69, at 24 (finding no impact); Caughey & Warshaw, *supra* note 69, at 23 (finding ambiguous but somewhat positive effects); Shor, *supra* note 32, at 23 (finding no impact).

legislative level. We explicate our critique in greater detail in the next section.

C. Limitations

The essential problem with the existing literature is that almost none of it measures *both* voters' and representatives' preferences. It therefore gives little help to courts and policymakers who would like to evaluate and formulate policies based on their implications for preference responsiveness and alignment. Take, for instance, the vast majority of franchise access and campaign finance studies. They typically ask whether franchise restrictions or campaign finance regulations alter the partisan makeup of the electorate or of the legislature.⁷² But neither voters' partisan choices (in most elections⁷³) nor legislators' partisan affiliations are suitable proxies for policy preferences. The binary decision of which party to vote for, or to associate with, sheds little light on the more complex issue of political ideology.

Similarly, the concepts of electoral responsiveness and partisan bias that preoccupy many redistricting scholars both link parties' legislative seat shares to their statewide vote shares.⁷⁴ These metrics too are indicative of voters' and legislators' partisan inclinations, but not of their policy views. They are helpful if one is interested in *partisan* responsiveness or alignment, but much less relevant if one's concern is the relationship between voters' and legislators' *policy* preferences.

Unlike this work, many of the party regulation studies do quantify legislators' policy preferences, usually in order to see whether representation is affected by the type of primary that a state holds.⁷⁵ Some of these studies also include measures of voters' preferences in

72. See, e.g., GROSS & GOIDEL, *supra* note 54, at 81 (considering only voters' partisan choices); Mitchell & Wlezien, *supra* note 43, at 186, 195 (same); Primo et al., *supra* note 50, at 279 (same); Burden et al., *supra* note 41, at 8 (same); Gomez, *supra* note 40, at 19 (same); see also, e.g., Klumpp et al., *supra* note 52, at 28 (considering only representatives' partisan affiliations); Hall, *supra* note 52 (same).

73. As we discuss below, voters' partisan choices in *presidential* elections actually are quite good proxies for their political ideologies. See *infra* Part III.A.

74. See, e.g., Gelman & King, *supra* note 59, at 543, 549, 552 (using bias and responsiveness to analyze redistricting issues); Jackman, *supra* note 63, at 345, 350 (same); Kogan & McGhee, *supra* note 61, at 22–24 (same); Stephanopoulos, *supra* note 62, at 710–15 app. tbls.2–5 (same); Cain et al., *supra* note 63, at 13 (same).

75. See, e.g., Bullock & Clinton, *supra* note 45, at 921 (using roll call voting data to quantify representatives' preferences); Gerber & Morton, *supra* note 45, at 313–14 (using interest group ratings to do so); McGhee et al., *supra* note 7, at 341–42 (also using roll call voting data); Westley, *supra* note 45, at 369 (also using interest group ratings); Kousser et al., *supra* note 46, at 7 (using candidate survey data to do so).

their analyses.⁷⁶ But even in this literature, preference responsiveness and alignment almost never are examined directly. At best, voters' preferences are treated as controls in the models; they are not actually used to estimate the democratic values that are of interest to us.⁷⁷ As far as we know, only a single study in this area has calculated responsiveness and alignment explicitly, and even this study was limited to a single state's reform of its primary system.⁷⁸

Lastly, the governmental structure scholarship explores how public opinion is connected to actual policy outcomes, not to legislators' policy preferences.⁷⁹ The scholarship gauges *voters'* policy preferences using opinion surveys, but it does not apply the same approach to elected officials.⁸⁰ Instead, it looks to statutory compilations and other official sources to determine which policies in fact have been enacted by the elected branches. As a result, the studies in this field are able to measure *outcome* responsiveness and alignment, but not *preference* responsiveness and alignment.⁸¹

The other weakness we perceive in the existing literature is that most of it assesses electoral rules in congressional (or even higher-level) elections. Very little of it aims to ascertain the rules' implications at the state legislative level, even though this is where the greatest policy variation and the largest number of constituencies can be found. For example, we are not aware of a single franchise access or governmental structure study that carries out its analysis at the state legislative level. Instead, these studies tend to investigate the effects of franchise restrictions and structural factors, respectively, in statewide elections and on statewide policy.⁸² Likewise, two of us have conducted the only study to date on the impact of primary type on state legislators' policy positions.⁸³ All of the other work in this domain has examined the link

76. See, e.g., Bullock & Clinton, *supra* note 45, at 922; Gerber & Morton, *supra* note 45, at 314–18; McGhee et al., *supra* note 7, at 342.

77. See *supra* note 76.

78. See Kousser et al., *supra* note 46; cf. Westley, *supra* note 45, at 369–70 (using residuals from regression of interest group ratings on district characteristics as proxy for preference alignment).

79. See, e.g., Arcenaux, *supra* note 68, at 378 (examining state abortion policies); Burden, *supra* note 68, at 380 (examining state abortion and death penalty policies); Gerber, *supra* note 68, at 112–13 (examining state abortion policies); Lax & Phillips, *supra* note 32, at 150–51 (examining array of state policies); Matsusaka, *supra* note 68, at 139–41 (same); Monogan et al., *supra* note 69, at 310 (examining overall state policy liberalism).

80. See sources cited *supra* note 79.

81. The one exception is again Shor, *supra* note 32, who studies preference alignment at the chamber level cross-sectionally.

82. See *supra* notes 40–43 and 68–71 (discussing these studies).

83. See McGhee et al., *supra* note 7.

between primary type and U.S. House members' views.⁸⁴ The scholarship on redistricting is dominated by congressional studies as well. Our own contributions are among the very few studies that have scrutinized line-drawing institutions and criteria at the state legislative level.⁸⁵

The lone exception to our critique is the campaign finance literature, a good deal of which evaluates the effects of campaign finance regulations in state legislative elections.⁸⁶ At the congressional level, the rules on campaign contributions and expenditures are set by federal law, meaning that there is no state-by-state variation whatsoever. The geographic divergences that allow meaningful conclusions to be drawn exist only at the state legislative level, and accordingly that is where several studies in this area have cast their attention.⁸⁷

Our assessment of the literature raises two related questions: First, why have existing studies not sought to measure preference responsiveness and alignment, especially at the state legislative level? And second, are preference responsiveness and alignment even worth measuring, given the literature's manifest lack of interest in them? As to the first question, there likely are two reasons why the literature has not exhausted our subject of inquiry already. The first is that preference responsiveness and alignment were not defined clearly until relatively recently. For decades, political scientists focused on responsiveness alone, typically by calculating the correlation between some measure of public opinion and some metric of legislators' policy views.⁸⁸ The point that responsiveness refers to the *rate of change* of legislators' preferences given some shift in voters' preferences, while alignment denotes the *congruence* of voters' and legislators' preferences, was not grasped fully until the last decade or so.⁸⁹ Indeed, prominent law

84. See *supra* notes 44–49 (discussing these studies).

85. See Kogan & McGhee, *supra* note 61, at 16–25; Stephanopoulos, *supra* note 62, at 679–86; see also Forgette et al., *supra* note 65, at 158–61; Cain et al., *supra* note 63, at 8–11.

86. See, e.g., Malhotra, *supra* note 50, at 269–71; Primo et al., *supra* note 50, at 274–77; Stratmann & Aparicio-Castillo, *supra* note 50, at 184–86; Barber, *supra* note 55, at 8–9; Hall, *supra* note 58, at 6–7; La Raja & Schaffner, *supra* note 56, at 6–7.

87. See sources cited *supra* note 86.

88. See, e.g., Lax & Phillips, *supra* note 32, at 149 (noting that while “[t]he existing literature establishes a high degree of responsiveness to ideology . . . it cannot usually answer questions about congruence”); Matsusaka, *supra* note 68, at 136 (referring to “the conventional ‘correlation’ approach that uses preference proxies to measure responsiveness”); Shor, *supra* note 32, at 2 (explaining how methodological issues have “long bedeviled attempts to assess congruence at the state level, so analysts have typically had to fall back on responsiveness as a benchmark” (internal quotations marks omitted)).

89. Some of the studies that make this point most clearly are Lax & Phillips, *supra* note 32, at 148 and Shor, *supra* note 32, at 2. See also *supra* note 32 (discussing these studies).

professors and political scientists continue to confuse the two concepts on occasion.⁹⁰

The second reason why preference responsiveness and alignment have not been analyzed thoroughly, at least at the state legislative level, is that the necessary data for such analysis previously did not exist.⁹¹ At the congressional level, interest groups such as Americans for Democratic Action and the American Conservative Union have issued ratings of legislators' voting records for decades,⁹² and in the 1980s, political scientists devised a technique for converting roll call voting data into ideological ideal points.⁹³ Information on voters' preferences in congressional districts also has long been available in the form of aggregated presidential election results⁹⁴ and public opinion polling.⁹⁵ At the state legislative level, on the other hand, the earliest ideal point estimates were generated in 2002,⁹⁶ and reasonably complete estimates, based on roll call voting data from all

90. See, e.g., RICHARD A. POSNER, LAW, PRAGMATISM, AND DEMOCRACY 165–66 (2003) (conflating “responsiveness to public opinion” with “align[ing] the behavior of politicians and officials with the people’s interests”); Stephen Ansolabehere et al., *Candidate Positioning in U.S. House Elections*, 45 AM. J. POL. SCI. 136, 138 (2001) (using “responsiveness” and “congruence” interchangeably and referring to them as same “idea”); cf. John G. Matsusaka, *Problems with a Methodology Used to Evaluate the Voter Initiative*, 63 J. POL. 1250, 1250–54 (2001) (criticizing several political scientists for confusing responsiveness and alignment).

91. See Tausanovitch & Warshaw, *supra* note 6, at 337 (“In the past, state politics scholars have been hindered by the unavailability of data on policy preferences at the level of state legislative districts.”).

92. See ACU *Federal Legislative Ratings*, AM. CONSERVATIVE UNION, <http://acuratings.conservative.org/acu-federal-legislative-ratings/>, archived at <http://perma.cc/3ATZ-T489> (last visited Jan. 16, 2015); *Voting Records*, AMS. FOR DEMOCRATIC ACTION, <http://www.adaction.org/pages/publications/voting-records.php>, archived at <http://perma.cc/M3KR-BZW9> (last visited Jan. 16, 2015).

93. See, e.g., KEITH T. POOLE & HOWARD ROSENTHAL, CONGRESS: A POLITICAL-ECONOMIC HISTORY OF ROLL CALL VOTING 11–14 (1997); Keith T. Poole & Steven Daniels, *Ideology, Party, and Voting in the U.S. Congress, 1959-1980*, 79 AM. POL. SCI. REV. 373, 374 (1985).

94. Every four years, the *Cook Political Report* publishes its partisan voter index (PVI), which “measures how each district performs at the presidential level compared to the nation as a whole.” David Wasserman, *Partisan Voter Index*, COOK POLITICAL REPORT (Apr. 4, 2013), <http://cookpolitical.com/story/5604>, archived at <http://perma.cc/HZM8-4V57>. Political scientist Gary Jacobson also maintains a database of presidential election results aggregated by congressional district from 1946 to the present. See Stephanopoulos, *supra* note 62, at 679 n.40 (discussing this database).

95. See, e.g., Joshua D. Clinton, *Representation in Congress: Constituents and Roll Calls in the 106th House*, 68 J. POL. 397, 397 (2006); Warren E. Miller & Donald E. Stokes, *Constituency Influence in Congress*, 57 AM. POL. SCI. REV. 45, 46 (1963); Boris Shor & Jon C. Rogowski, *Congressional Voting by Spatial Reasoning, 2000-2010* (Oct. 11, 2012) (unpublished paper) (on file with authors).

96. See John H. Aldrich & James S. Coleman Battista, *Conditional Party Government in the States*, 46 AM. J. POL. SCI. 164, 165–68 (2002).

ninety-nine state legislative chambers, were not released until 2011.⁹⁷ Similarly, it was not until 2013 that either aggregated presidential election results or estimates of voters' ideologies became available for most state legislative districts.⁹⁸ And a unified database of all the electoral policies that shape states' political systems—and that might be linked in some way to preference responsiveness and alignment—has never before been assembled.

As for the second question, whether preference responsiveness and alignment are worth investigating in the first place, we believe they occupy a sort of sweet spot in the study of representation. *Partisan* responsiveness and alignment undoubtedly are important, but even when they are achieved, the relationship between voter and representative may remain severely flawed. Assume, for instance, that in one election the median voter in a district is a Democrat and so is the candidate elected, and that in the next election the median voter and the winning candidate both are Republicans. Assume also that after the first election the politician's voting record is far more liberal than the median voter would like, and that after the second it is far more conservative.⁹⁹ Then we have partisan responsiveness and alignment—since the legislator's partisan affiliation is responsive to and congruent with the median voter's partisan preference—but we have a troubling lack of *policy* representation as well. After neither election does the legislator even remotely share the median voter's policy views.

Conversely, *outcome* responsiveness and alignment are significant too, but they strike us as overly ambitious goals for electoral rules to accomplish on their own. The policies that actually are enacted by the elected branches indeed are the product, in part, of the rules that govern the electoral system. But they also are the product of myriad factors that are beyond the scope of these rules: politicians' own interests and agendas, partisan pressures inside and outside the legislature, legislative structures and voting rules, relations between the legislative and executive branches, and so forth.¹⁰⁰ Given all of these

97. See Shor & McCarty, *supra* note 8, at 531; see also Bonica, *supra* note 9, at 367 (estimating state legislators' ideologies based on the identities of their campaign donors); cf. Barber, *supra* note 55, at 8 ("Until recently, no data existed to measure the ideology of state legislators over time.").

98. See McGhee et al., *supra* note 7, at 342; Tausanovitch & Warshaw, *supra* note 6, at 330.

99. This is a very plausible scenario in contemporary America—indeed it seems to be the norm. See, e.g., Stephen Ansolabehere et al., *The Effects of Party and Preferences on Congressional Roll-Call Voting*, 26 LEGIS. STUD. Q. 533, 541 (2001) (showing that distribution of legislators' roll-call votes is far more bimodal than distribution of constituents' opinions); Joseph Bafumi & Michael C. Herron, *Leapfrog Representation and Extremism: A Study of American Voters and Their Members in Congress*, 104 AM. POL. SCI. REV. 519, 528 (2010) (same).

100. See Stephanopoulos, *supra* note 3, at 360–65 (discussing these factors at length).

factors, we think it is unrealistic to expect electoral rules to bring about outcome responsiveness and alignment by themselves. For the same reason, we think scholars who are interested in the effects of these rules would do well to broaden their inquiries to other, more attainable types of representation.

If partisan representation is not a demanding enough criterion, and outcome representation is *too* demanding, then preference representation seems just right to us. It recognizes that a democracy is not functioning well merely because legislators' partisan affiliations and voters' partisan preferences are linked. But it also does not ask of electoral rules more than they plausibly can deliver. Its more modest aim is simply to tether voters' and legislators' policy preferences, thus directly improving the quality of representation and indirectly increasing the likelihood of responsive and aligned policy outcomes. This is a valuable goal, in our view, and one that is well worth further exploration despite its neglect by the existing literature.¹⁰¹ We therefore devote the rest of this Article to our empirical analysis of electoral policies' effects on preference responsiveness and alignment.

III. EMPIRICAL ANALYSIS

Our analysis begins with a description of the data we use. Most of our information on voters' preferences, legislators' preferences, and states' electoral policies either has become available very recently, or has never been available until now. Next, we explain our methodology for calculating responsiveness and alignment. We estimate responsiveness (at the chamber level) by regressing the change in the median legislator's preferences from one period to the next on the change in the median voter's preferences. We estimate alignment (at both the district and chamber levels) by modeling legislators' preferences as a function of their constituents' preferences, and then computing the resulting regression residuals. These residuals capture the gap between the representation that would correspond to voters' views and the representation the voters actually receive.

101. For a selection of scholars who also have recognized the importance of preference responsiveness and alignment, see G. BINGHAM POWELL, JR., *ELECTIONS AS INSTRUMENTS OF DEMOCRACY: MAJORITARIAN AND PROPORTIONAL VISIONS* 122 (2000) ("In contemporary democracies elections are supposed to establish connections that compel or greatly encourage the policymakers to do what the citizens want."); Jane Mansbridge, *Rethinking Representation*, 97 AM. POL. SCI. REV. 515, 526 (2003) ("[C]onstituent-representative congruence . . . is a factor in each of the forms of representation."); and Michael D. McDonald et al., *What Are Elections For? Conferring the Median Mandate*, 34 BRIT. J. POL. SCI. 1, 2 (2004) ("To be truly democratic, the rules for [elections] should empower the voter median by ensuring that it is also the policy position of the [representative].").

Our findings on the effects of different electoral policies can be summarized most easily by issue area. First, among franchise access rules, identification requirements have little impact while early voting improves alignment. Second, among party regulations, sore loser laws are aligning while certain types of open primaries worsen alignment and responsiveness. Third, among campaign finance reforms, limits on individual contributions are aligning while public financing schemes are misaligning. Fourth, among redistricting policies, independent commission usage is aligning, while the effects of traditional line-drawing criteria vary by electoral level. And fifth, among variants of governmental structure, term limits are misaligning. There are other significant results in the models as well, but these are the most robust, in our view.

Lastly, we perform a series of robustness checks to ensure that our findings are reliable. Specifically, we rerun our models using an alternative measure of responsiveness; omit states for which our estimates of presidential election results by state legislative district are less accurate; collapse our electoral policies into a much smaller number of categories; and replicate another political scientist's analysis of how chamber-level alignment is affected by a number of reforms. On the whole, these checks strongly corroborate our results.

A. Data Sources

We noted earlier that data on voters' preferences, legislators' preferences, and electoral policies at the state legislative district level previously did not exist.¹⁰² This data now *does* exist, thanks to both our own efforts and those of other scholars, and it forms the foundation of this project. First, with respect to voters' preferences, political scientists Chris Tausanovitch and Christopher Warshaw recently merged nine nationwide surveys, all carried out between 2004 and 2011, with a total of 275,000 respondents.¹⁰³ They then carried out a cutting-edge statistical procedure known as multi-level regression and post-stratification, which enables accurate public opinion estimates to be generated even for relatively small populations.¹⁰⁴ State legislative districts are among the geographic units for which Tausanovitch and

102. See *supra* notes 91–98 and accompanying text.

103. See Tausanovitch & Warshaw, *supra* note 6, at 332.

104. See *id.* at 333–36; see also Jeffrey R. Lax & Justin H. Phillips, *How Should We Estimate Public Opinion in the States?*, 53 AM. J. POL. SCI. 107, 109–10 (2009) (describing this technique in more detail).

Warshaw produced estimates of citizens' policy preferences.¹⁰⁵ These estimates would be ideal for our purposes were it not for the fact that they are available only for a single point in time (the entire 2004–2011 period).

Because of this limitation, we also collected presidential election results aggregated by state legislative district, which *do* vary temporally. Presidential election results are widely considered an excellent proxy for voters' policy preferences because they too are the product of voters' underlying ideological views. In an article on the measurement of district-level public opinion, for instance, Warshaw and Jonathan Rodden observe that “[e]mpirical researchers in need of a catchall one-dimensional proxy for district ideology have typically turned to the district-level presidential vote.”¹⁰⁶ Similarly, the correlation between Tausanovitch and Warshaw's public opinion estimates and 2008 presidential vote shares is higher than 0.9 at the state level.¹⁰⁷ We therefore feel comfortable using presidential data as our principal measure of voters' preferences (though we also run certain models using Tausanovitch and Warshaw's estimates).

In prior work, one of us assembled presidential election results aggregated by state legislative district for 2000, 2004, and 2008.¹⁰⁸ A group of Daily Kos analysts gathered this data for 2012.¹⁰⁹ For 1992 and 1996, lastly, we submitted freedom of information requests to all fifty

105. See Tausanovitch & Warshaw, *supra* note 6, at 337–39 (using these estimates to analyze representation in state legislatures).

106. Christopher Warshaw & Jonathan Rodden, *How Should We Measure District-Level Public Opinion on Individual Issues?*, 74 J. POL. 203, 211 (2012). For examples of political scientists using district-level presidential vote shares as a proxy for voters' policy preferences, see Ansolabehere et al., *supra* note 99, at 540; Brandice Canes-Wrone et al., *Out of Step, Out of Office: Electoral Accountability and House Members' Voting*, 96 AM. POL. SCI. REV. 127, 131 (2002); Seth E. Masket & Hans Noel, *Serving Two Masters: Using Referenda to Assess Partisan Versus Dyadic Legislative Representation*, 20 POL. RES. Q. 1, 3–4 (2011); and McGhee et al., *supra* note 7, at 342. But see Georgia Kernell, *Giving Order to Districts: Estimating Voter Distributions with National Election Returns*, 17 POL. ANALYSIS 215, 216–19 (2009) (noting that unless districts' ideological variances are equal, presidential vote shares may be misleading). To the extent the presidential vote is a noisy proxy for actual district ideology, our coefficient estimates are biased downward, and any findings that do attain statistical significance are more credible.

107. See Tausanovitch & Warshaw, *supra* note 6, at 335; see also Masket & Noel, *supra* note 106, at 14 (also finding correlation above 0.9); Kousser et al., *supra* note 44, at 11 (finding correlation as high as 0.94 between estimates of district ideology and presidential vote shares).

108. This was Rogers. See McGhee et al., *supra* note 7, at 342 (using this data). This dataset is comprehensive except that it is missing Gore-Bush figures for the New Mexico Senate and the Arkansas, Colorado, and Mississippi state legislatures, and Kerry-Bush figures for the Florida and Mississippi state legislatures.

109. See *Daily Kos Elections' Statewide Election Results by Congressional and Legislative Districts*, DAILY KOS (July 9, 2013, 11:52 AM), <http://www.dailykos.com/story/2013/07/09/1220127/-Daily-Kos-Elections-2012-election-results-by-congressional-and-legislative-districts>, archived at <http://perma.cc/W697-NBKN>.

states, thereby obtaining the requisite results for several jurisdictions. For states that were unable to produce the data, we used county-level presidential election results to estimate the results by state legislative district.¹¹⁰ This procedure has been found to be quite accurate, especially for states with large numbers of counties, and thus is a reasonable alternative when the actual data is unavailable.¹¹¹ Our resulting database of presidential election results aggregated by state legislative district is by far the most comprehensive of its kind.

Second, with respect to legislators' preferences, political scientists Boris Shor and Nolan McCarty recently compiled roll call voting data for all ninety-nine state legislative chambers from 1993 to 2013.¹¹² They then merged this data with candidates' responses to a policy survey administered by Project Vote Smart over the last two decades.¹¹³ In combination, these two datasets enabled Shor and McCarty to calculate ideal points for all state legislators who served during the relevant timeframe.¹¹⁴ These ideal points serve as our core measure of legislators' policy positions. They capture, on a single left-right axis, the ideologies of legislators in all states over nearly two decades.

Unfortunately, the Shor and McCarty scores do not vary over time. As they acknowledge, "Because we bridge legislatures over time by estimating a single ideal point for each legislator, we do not allow for ideological drift by individuals."¹¹⁵ However, the invariant nature of these scores is not overly worrisome since legislators usually maintain consistent positions over time¹¹⁶ and representation still may shift via

110. More specifically, we disaggregated the county-level data to the census block group level on the basis of counties' and block groups' adult populations. We then aggregated back up to state legislative districts using district maps made available by the census to determine which block groups are located in which districts. See *Cartographic Boundary Shapefiles—State Legislative Districts—Upper and Lower*, U.S. CENSUS BUREAU, http://www.census.gov/geo/maps-data/data/cbf/cbf_sld.html, archived at <http://perma.cc/MRV5-A4GJ> (last visited Jan. 16, 2015). This is the same procedure that other political scientists have employed as well. See Shor & McCarty, *supra* note 8, at 543; Carl Eoin Klarner & C. Lockwood Reynolds, *Using County Data to Estimate State Legislative District Characteristics* (2013) (unpublished paper) (on file with authors).

111. See Shor & McCarty, *supra* note 8, at 543 (finding correlation above 0.8 for Texas state legislative districts' estimated and actual presidential election results); Klarner & Reynolds, *supra* note 110, at 10 fig.1 (showing that correlation between estimated and actual presidential election results is higher than 0.7 for most states' legislative districts).

112. See Shor & McCarty, *supra* note 8, at 531; see also *Data*, MEASURING AM. LEGISLATURES, <http://americanlegislatures.com/data/>, archived at <http://perma.cc/T3SJ-4WE6> (last visited Feb. 12, 2015) (containing most recent update to Shor and McCarty scores).

113. See Shor & McCarty, *supra* note 8, at 532–33.

114. See *id.* at 533–37.

115. *Id.* at 533.

116. See Bafumi & Herron, *supra* note 97, at 526; Keith T. Poole, *Changing Minds? Not in Congress!*, 131 PUB. CHOICE 435, 435 (2007) (presenting "evidence that members of Congress die

replacement.¹¹⁷ As detailed below, we also take into account the scores' invariability by including only *newly elected* legislators in our district-level analyses. That way each legislator (with each fixed ideal point) appears only once in our models.¹¹⁸

We note as well that we considered using the ideal points that Adam Bonica recently generated using the identities of candidates' campaign donors.¹¹⁹ These ideal points *do* vary over time as candidates' donor bases shift.¹²⁰ But because of the relatively small number of people who give to each state legislative candidate, the estimates are not very reliable at this low electoral level. They can distinguish crudely between liberal and conservative candidates, but unlike the Shor and McCarty scores, they do not enable more fine-grained distinctions between *types* of liberalism and conservatism.¹²¹ Accordingly, despite their appealing temporal dynamism, we do not further employ the Bonica ideal points in this Article.

Our final category of data is information about states' electoral policies over the 1992–2012 period. How these policies influence responsiveness and alignment, of course, is the key question we seek to answer in this Article. We consulted a wide range of primary and secondary sources to ascertain which states implemented which policies at which times. As in our earlier review of the literature, we sorted the policies into five groups: (1) franchise access, (2) party regulation, (3) campaign finance, (4) redistricting, and (5) governmental structure.¹²² Below we provide information on the policies we coded within each group as well as the sources we relied upon to do so:¹²³

- *Franchise access*: requirements to show nonphoto identification before voting; requirements to show photo identification before voting; requirements to prove citizenship before registering to

in their ideological boots," that is, "adopt an ideological position and maintain that position throughout their careers").

117. Since Shor and McCarty calculate separate ideal points for each *legislator*, if a given politician is replaced by another, then representation indeed may shift at the district level.

118. *See infra* Part III.B.

119. *See* Bonica, *supra* note 9, at 370–76.

120. *See id.* at 379–82.

121. *See id.* at 376 (noting correlations of only about 0.6 between Shor and McCarty and Bonica estimates of parties' median legislators' ideal points in state legislatures).

122. *See supra* Part II.B.

123. It is worth noting again that no electoral policy database as extensive as ours has been assembled previously. The most similar existing databases are by Besley & Case, *supra* note 41, at 18 and Matsusaka, *supra* note 68, at 139–41.

vote; availability of early voting; availability of same-day voter registration; and felon disenfranchisement rules.¹²⁴

- *Party regulation*: type of party primary (open, semi-open, closed, semi-closed, or nonpartisan); and sore loser laws banning candidates defeated in primaries from running again in general election.¹²⁵
- *Campaign finance*: individual contribution limits; corporate contribution limits; union contribution limits; PAC contribution limits; corporate spending bans; union spending bans; and public financing.¹²⁶
- *Redistricting*: criteria used for redistricting (compactness, respect for political subdivisions, respect for communities of interest, respect for prior district cores, and/or incumbency protection); and institution responsible for redistricting (unified government, divided government, commission, or court).¹²⁷

124. The National Conference of State Legislatures (NCSL) provides data on most of these policies. See *Absentee and Early Voting*, NCSL (Oct. 21, 2014), <http://www.ncsl.org/research/elections-and-campaigns/absentee-and-early-voting.aspx>, archived at <http://perma.cc/69F6-E9YE>; *Same Day Voter Registration*, NCSL (May 6, 2014), <http://www.ncsl.org/research/elections-and-campaigns/same-day-registration.aspx>, archived at <http://perma.cc/J366-BDTQ>; *Voter Identification Requirements | Voter ID Laws*, NCSL (Oct. 31, 2014), <http://www.ncsl.org/research/elections-and-campaigns/voter-id.aspx>, archived at <http://perma.cc/7MBC-354R>. The best source for early voting rules is *Non-Precinct Place Voting*, PEW CHARITABLE TRUSTS (Apr. 2, 2010), <http://www.pewstates.org/research/reports/non-precinct-place-voting-85899378759>, archived at <http://perma.cc/29UJ-UPXN>. The best source for felon disenfranchisement rules is NICOLE D. PORTER, THE SENTENCING PROJECT, EXPANDING THE VOTE: STATE FELONY DISENFRANCHISEMENT REFORM, 1997–2010 (2010), http://www.sentencingproject.org/doc/publications/publications/vr_expandingthevotefinaladdendum.pdf, archived at <http://perma.cc/3QDP-ZN47>. We supplemented all of our sources for this project by consulting archived versions of online materials as well as current and prior compilations of state laws.

125. For data on primary type, see McGhee et al., *supra* note 7, at 339–41. For data on sore loser laws, see Burden et al., *supra* note 44, at 33–37.

126. NCSL is the best source for campaign finance laws in effect in recent years. See *Contribution Limits: An Overview*, NCSL (Oct. 3, 2011), <http://www.ncsl.org/research/elections-and-campaigns/campaign-contribution-limits-overview.aspx>, archived at <http://perma.cc/62X6-85ES>; *Public Financing of Campaigns: An Overview*, NCSL (Jan. 23, 2013), <http://www.ncsl.org/research/elections-and-campaigns/public-financing-of-campaigns-overview.aspx>, archived at <http://perma.cc/5NN7-YS4Z>. The Federal Election Commission (FEC) is the best source for earlier years. See, e.g., FEC, CAMPAIGN FINANCE LAW 2002: A SUMMARY OF STATE CAMPAIGN FINANCE LAWS WITH QUICK REFERENCE CHARTS (2002), available at <http://www.fec.gov/pubrec/cfl/cfl02/cfl02.shtml>, archived at <http://perma.cc/92HA-J5FN>. For data on expenditure limits in particular, see Klumpp et al., *supra* note 52, at 16.

127. Stephanopoulos has coded these redistricting policies in a prior work. See Stephanopoulos, *supra* note 62, at 690 n.90. NCSL again is the best secondary source for these policies. See NCSL, REDISTRICTING LAW 2010, at 161–217 (2009), <http://redistrictingonline.org/>

- *Governmental structure*: availability of voter initiative; availability of legislator recall; presence of legislative term limits; and level of legislative professionalism.¹²⁸

B. Methodology

In combination, our three categories of data—on voters’ preferences, legislators’ preferences, and electoral policies—allow us to estimate the effects of different reforms on alignment and responsiveness. The first two types of data enable the calculation of alignment and responsiveness at the district and chamber levels. Once these concepts have been quantified, the third kind of data makes possible assessments of actual policy impact. Below we explain in more detail our strategies for measuring alignment and responsiveness and then investigating causality.

Both alignment and responsiveness, again, refer to certain relationships between voters’ preferences and legislators’ preferences.¹²⁹ Alignment denotes the *congruence* of these preferences, while responsiveness captures the *rate of change* of legislator ideology given a shift in constituent ideology.¹³⁰ But while these definitions are clear in the abstract, complexities arise when voters’ and legislators’ preferences are gauged using different techniques. After all, who can say what the relationship *should* be between voting record (our metric

uploads/Redistrictinglaw2010.pdf, *archived at* <http://perma.cc/F3NA-QPE8>; NCSL, REDISTRICTING LAW 2000 (1999), *available at* <http://www.senate.leg.state.mn.us/departments/scr/redist/red2000/red-tc.htm>, *archived at* <http://perma.cc/KZ6V-WVXR>. For useful data on the 2000 and 2010 cycles, see ALL ABOUT REDISTRICTING, <http://redistricting.ills.edu/>, *archived at* <http://perma.cc/VKG9-HRP7> (last visited Jan. 16, 2015). For useful data on the 1990 cycle, see *Action on Redistricting Plans: 1991-99*, NCSL (Oct. 24, 2003), <http://www.senate.leg.state.mn.us/departments/scr/redist/Redsum/Action1990.htm>, *archived at* <http://perma.cc/BJU2-GL7F>.

128. Voter initiative data is available at *Initiative and Referendum States*, NCSL (Sept. 2012), <http://www.ncsl.org/research/elections-and-campaigns/chart-of-the-initiative-states.aspx>, *archived at* <http://perma.cc/V3AQ-9ETP>. Term limits data is available at *The Term-Limited States*, NCSL (Feb. 11, 2013), <http://www.ncsl.org/research/about-state-legislatures/chart-of-term-limits-states.aspx>, *archived at* <http://perma.cc/R77U-Q4PT>. Recall data is available at *Recall of State Officials*, NCSL (Sept. 11, 2013), <http://www.ncsl.org/research/elections-and-campaigns/recall-of-state-officials.aspx>, *archived at* <http://perma.cc/9CUG-LEEQ>. Peverill Squire has quantified legislative professionalism using criteria such as salary and benefits, time demands of service, and staff and resources. See PEVERILL SQUIRE, *THE EVOLUTION OF AMERICAN LEGISLATURES: COLONIES, TERRITORIES, AND STATES, 1916–2009*, at 266–316 (2012); Peverill Squire, *Measuring State Legislative Professionalism: The Squire Index Revisited*, 7 ST. POL. & POL’Y Q. 211, 213, 220–21 (2007).

129. We are referring here (as throughout this Part and the next) to *preference* alignment and responsiveness, and not their other variants.

130. *See supra* Part II.A.

of legislator ideology) and the presidential vote (our usual metric of constituent ideology)? Theories of representation suggest there should be some connection, but they do not specify how strong this link should be. In particular, voters may expect different behavior from their state legislator than from their president, and so may cast ballots based on different criteria in races for each office, thus rendering our metrics only weakly related.

In all of the models we run, we respond to this concern by focusing on *relative* rather than *absolute* levels of alignment and responsiveness. Even though we may not know the ideal relationship between voting record and the presidential vote, we still may draw conclusions based on how this relationship changes after reforms are enacted.¹³¹ For instance, if alignment increases after a given policy is introduced (even with all the necessary controls included), then we may surmise that the policy improves representation despite our lack of certainty about the optimal level of alignment. In addition, when we calculate alignment and responsiveness, we incorporate our divergent metrics of voters' and legislators' preferences as follows.

First, for alignment at the district level, we begin by regressing legislator ideology (captured by the Shor and McCarty scores) on voter ideology (captured by the presidential vote or the Tausanovitch and Warsaw scores). We consider only state house members in our models, because the staggered terms of many state senates make them more difficult to analyze. We also consider only newly elected legislators because otherwise, due to the static nature of the Shor and McCarty scores, incumbents would be included multiple times but always with the same ideal points.

This analysis reveals the *overall* relationship between voters' and legislators' preferences. In other words, it indicates how a typical legislator would vote given the ideological views of her constituents. Once this relationship has been determined, the computation of alignment is straightforward. All we have to do is compare a legislator's *expected* ideal point (given her voters' preferences) with her *actual* ideal point. The difference between these two figures is known as a regression residual—and the smaller it is, the more closely aligned a legislator is with her constituents.

It would be preferable, of course, if our metrics of voters' and legislators' preferences used the same scale. Then they could be compared directly, without any need to consider regression residuals.

131. See John D. Griffin, Party Polarization and Representation 10 (2013) (unpublished paper) (on file with authors) (noting that in studies that "focus[] on *relative* representation over time," various kinds of measurement error "will not affect our inferences").

But only voters' and legislators' *current* preferences can be placed on the same axis (by surveying voters about issues that their legislators already have addressed through their roll call votes or through polls of their own).¹³² Voters' and legislators' *past* preferences cannot be standardized since the necessary voter surveys simply were not conducted. Accordingly, we have no choice but to use our residual technique to measure alignment. Fortunately, this technique has been employed previously by numerous scholars and is accepted widely in the field.¹³³ It also produces very similar results to the direct comparison of voters' and legislators' preferences when they are available on the same scale.¹³⁴

Second, we calculate alignment at the *chamber* level—that is, how closely aligned the median legislator is with the median voter in the state—through a variant of the above procedure.¹³⁵ But this time the basic units of our analysis are not individual districts but rather chambers in their entirety. We also consider *all* legislators here, not just newly elected ones, because our aim is to identify the median of the body as a whole. We thus regress the median legislator ideal point on the statewide presidential vote to determine the overall relationship between voter and legislator ideology at the chamber level. We then compare the expected median legislator ideal point with the actual median legislator ideal point to ascertain the level of alignment for each

132. For examples of studies using voter surveys to place voters' and representatives' current preferences on the same scale, see Bafumi & Herron, *supra* note 99, at 523–25, Cheryl Boudreau et al., Legal Interventions in the Market for Political Information: Lessons from Survey Experiments in Local Elections 19–21 (2013) (unpublished paper) (on file with authors), Stephen A. Jessee, *Spatial Voting in the 2004 Presidential Election*, 103 AM. POL. SCI. REV. 59, 64–68 (2009), Kousser et al., *supra* note 46, at 7, and Shor & Rogowski, *supra* note 95, at 6–14.

133. See, e.g., Jon R. Bond et al., *Explaining Challenger Quality in Congressional Elections*, 47 J. POL. 510, 519–20 (1985); David W. Brady et al., *Primary Elections and Candidate Ideology: Out of Step with the Primary Electorate?*, 32 LEGIS. STUD. Q. 79, 84 (2007); Daniel M. Butler, Discounting Disagreement: Experimental Evidence on How Legislators' Rationalizations Contribute to Polarization 16 (2013) (unpublished paper), *available at* www.danielmarkbutler.com/uploads/1/7/6/8/17688231/discounting_constituent_views.pdf, *archived at* <http://perma.cc/J4ET-RFHE>; Westley et al., *supra* note 45, at 369–70. But see Matsusaka, *supra* note 90, at 1250–56 (noting that this method makes a potentially inappropriate assumption as to the linear relationship between legislator and district ideology).

134. Using a range of datasets in which voters' and legislators' preferences were on the same scale, we obtained very high correlations (typically above 0.85) between the regression residuals and the congruence scores produced by subtracting the voters' preferences from the legislators' preferences. However, since the relationship is not *perfect*, our residual technique does introduce some additional noise compared to the direct comparison of voters' and legislators' preferences.

135. For one of the few studies to examine state-level alignment, see Bafumi & Herron, *supra* note 99, at 534–38.

body. Again, the smaller the gap between the expected and actual ideal points, the better the chamber's alignment, and vice versa.¹³⁶

Lastly, the invariancy of the Shor and McCarty scores means that we cannot calculate responsiveness at the district level. Responsiveness refers to the *change* in legislator ideology given a shift in voter ideology, but all of the legislators in our database have the *same* ideal points throughout their careers. Fortunately, this difficulty does not apply to the analysis of responsiveness at the chamber level.¹³⁷ At this level, the ideal point of the median legislator *does* vary over time—due to retirements, reelection losses, and redistricting—meaning that shifts are possible in our metrics for both voters' and legislators' preferences. We thus assess responsiveness by regressing the change in the median legislator ideal point from one year to another on the change in the statewide presidential vote over the same period.¹³⁸ And because presidential elections take place only every four years, we use only voters' preferences in those years and legislators' preferences in the immediately subsequent years.¹³⁹

To make our methodology easier to grasp, Figure 1 shows graphically how we calculate alignment and responsiveness. The first chart displays legislator ideal point versus the district-level presidential vote for a random sampling of districts in our database, with a best fit line indicating the overall relationship between the variables.¹⁴⁰ Our measure of district-level alignment is simply the vertical distance between each legislator's ideal point and the best fit line. Analogously, the second chart illustrates *median* legislator ideal point versus the *state*-level presidential vote for all chambers in our

136. Because this method uses *all* legislators in each chamber (with their static ideal points), it is biased against finding effects for electoral policies. Any effects we *do* find thus are more credible.

137. At the chamber level, one can conceive of both *temporal* responsiveness (the kind we study) and *spatial* responsiveness, i.e., the extent to which legislator ideal points change as one moves geographically from less to more conservative districts. See John D. Griffin, *Electoral Competition and Democratic Responsiveness: A Defense of the Marginality Hypothesis*, 68 J. POL. 911, 913–14 (2006) (distinguishing between “cross-district” and “within-district” responsiveness). We focus on temporal responsiveness because it better captures the value that Issacharoff and Pildes laud in their work. See *supra* Part II.A.

138. This approach allows us to estimate responsiveness for subsets of our data as well. We simply include in the model only the states or years in which we are interested.

139. This approach necessarily limits our data substantially. Also, as with chamber-level alignment, by including all legislators in our analysis, we bias it toward null results and so increase our confidence in any *non*-null results. See *supra* note 136.

140. As noted earlier, this chart includes only *newly elected* legislators. It also includes a random sampling of districts, rather than *all* districts, for ease of presentation. For a similar chart using only 2004 data (and imputed rather than actual presidential vote shares), see Shor & McCarty, *supra* note 8, at 543.

database, with a best fit line included as well.¹⁴¹ Our measure of chamber-level alignment is the vertical distance between each median legislator's ideal point and the best fit line. And the third chart depicts the *change* in median legislator ideal point from one year to another versus the *change* in the state-level presidential vote over the same period, again with a best fit line. Our measure of chamber-level responsiveness is the coefficient that results when the first shift is regressed on the second.¹⁴²

With our estimates of alignment and responsiveness in hand, we turn to the second stage of our analysis: determining how the metrics are affected by different electoral policies. We divide the policies into the same five categories as before—(1) franchise access, (2) party regulation, (3) campaign finance, (4) redistricting, and (5) governmental structure—though we also assess all of the policies in unison after concluding our more fine-grained examination. For each category, we carry out four OLS regressions: two for district-level alignment (one for Democrats and one for Republicans), a third for chamber-level alignment, and a fourth for chamber-level responsiveness.

With respect to alignment, all of our models use the *absolute value* of the regression residual as the dependent variable.¹⁴³ This strategy ensures that deviations in both a liberal and a conservative direction are treated analogously. All of our models also include the relevant policies as the key independent variables. And we consider Democrats and Republicans separately in our district-level models to allow for the possibility of partisan differences in representation. With respect to responsiveness, the change in the median legislator's ideal point is the dependent variable, and the key independent variables are the interactions of the policies with the change in the statewide presidential vote. The resulting interaction terms capture the policies' effects on the sensitivity of the median legislator's ideal point to shifts in the statewide presidential vote. That is, the terms capture chamber-level responsiveness itself.¹⁴⁴

141. As also noted earlier, the median ideal points are computed using *all* legislators' scores. For similar charts using 2000, 2004, and 2008 data, see *id.* at 544.

142. And as noted earlier as well, we calculate responsiveness using only voters' preferences in presidential election years and legislators' preferences in the following years.

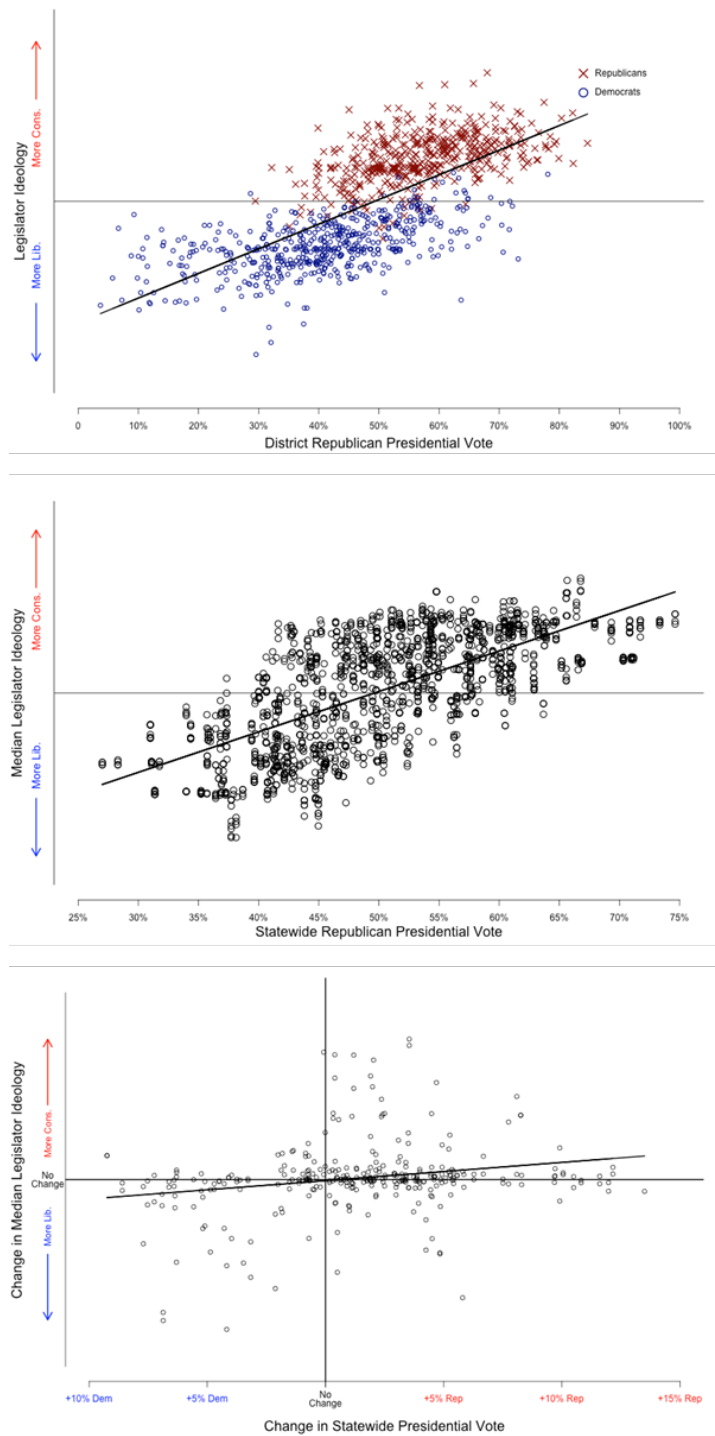
143. Because the Shor & McCarty scores range from -3 to 3, the absolute values of the regression residuals theoretically may vary from 0 to 6, as may the treatment effects of the various policies we examine. In practice, the largest treatment effects are on the order of -0.5 or 0.5.

144. For examples of other scholars using very similar modeling strategies to study responsiveness, see Griffin, *supra* note 137, at 916, and Tausanovitch & Warshaw, *supra* note 69, at 20.

It also is important to note that each model includes fixed effects for years and states. These fixed effects mean that each model features a full “difference-in-differences” design. The coefficient for each policy thus indicates the impact of the reform relative to both the state’s own prior history and developments in other states. This design controls for any time trends as well as any fixed differences among states due to politics, economics, demography, culture, or other factors. The design also capitalizes on the remarkable temporal and geographic variation of the policies in our database. It therefore brings us closer to the social scientific ideal of identifying the true causal effect of reform.¹⁴⁵

145. For a good discussion (and application) of fixed effects regression, see McGhee et al., *supra* note 7, at 343. Fixed effects are more appropriate here than *random* effects because the relevant clusters (years and states) are “of intrinsic interest,” and not merely “examples of possible clusters.” SOPHIA RABE-HESKETH & ANDERS SKRONDAL, 1 MULTILEVEL AND LONGITUDINAL MODELING USING STATA 97 (3d ed. 2012). Fixed effects also are a more rigorous test than random effects and so less likely to give rise to statistically significant findings. We make our analysis more rigorous still by clustering standard errors in our models. Despite our best efforts, of course, we cannot be as sure of causality as we would like. It is possible, for instance, that the effect we attribute to a particular policy change actually is due to a simultaneous change in some other aspect of a state’s policy, politics, or culture. We encourage researchers to continue exploring creative ways of addressing this inferential challenge.

Figure 1: Legislator Ideology Versus Presidential Vote



C. Results

We next present the results of our analysis. We begin with some summary statistics about alignment and responsiveness across the states and over time. These statistics provide a wealth of information about state legislative representation in the contemporary United States. We then proceed to our five electoral policy categories. For each category, we lay out hypotheses drawn from the existing literature about the effects of different reforms, describe the results of our models, and comment on their implications for the hypotheses. We conclude with a series of more comprehensive models that incorporate (almost) all of the policies in our database. These models capture the consequences of states' electoral regulatory environments in their (near) entirety.

1. Summary Statistics

Starting with district-level alignment, Figure 2's first chart shows the alignment of Democratic and Republican legislators in each state over the entire time period of our analysis.¹⁴⁶ The closer a state is located to the chart's origin, the more aligned its legislators tend to be with their constituents by our metric, and vice versa. One notable point is that just about every state's legislators are quite *misaligned*. No state's legislators are, on average, particularly near the origin. A second insight is that both Democrats and Republicans typically are misaligned in the direction of the ideological extremes. That is, Democrats tend to be too liberal for their constituents, and Republicans tend to be too conservative. There is very little misalignment toward the ideological *center*.¹⁴⁷

Third, the parties' misalignment is not symmetric. There are several states in which the average Democrat is almost perfectly aligned (e.g., Delaware, Georgia, Maryland, Oklahoma), and several in

146. To generate these state estimates, as well as the year estimates in Figure 2's second chart, we regressed the *real* (as opposed to *absolute*) residuals on fixed-effect variables for states and years separately for Democrats and Republicans. The predicted values from these regressions are displayed in the charts. This procedure helps account for changes in the composition of the sample, as not every state is represented in every year. For the state estimates, we generated predicted values for 2008, the last year in which virtually all states were present in the data. For the year estimates, we averaged all of the relevant state fixed-effects coefficients.

147. This finding is consistent with other studies of alignment. *See, e.g.*, Bafumi & Herron, *supra* note 99, at 528 ("What is most striking . . . is the extremism of members of the U.S. House as compared to state median voters . . ."); Kousser et al., *supra* note 46, at 40 (finding that members of House of Representatives from California almost universally are more extreme than median voter in their districts).

which she is extraordinarily *misaligned* (e.g., Arizona, California, Idaho, Wyoming). In contrast, the misalignment of the mean Republican varies much less. There are only a handful of states in which she is highly aligned (e.g., New York) *or* misaligned (e.g., California). Fourth, there seems to be a strong relationship between legislative polarization (which does not involve voters' views) and misalignment (which does). States such as Arizona and California have very high levels of both polarization and misalignment, while states such as Delaware and Rhode Island score much better on both metrics.¹⁴⁸ This suggests that legislative polarization is the product not of a polarized electorate, but rather of legislators who diverge from their more centrist constituents.¹⁴⁹

Figure 2's second chart displays the *trends* in mean district-level alignment from 1992 to 2010.¹⁵⁰ From 1992 to 2006, the alignment of Democratic and Republican legislators was roughly constant and about equal in magnitude. During this period, there was no particular asymmetry in alignment, nor any major fluctuations in its levels. But from 2006 to 2010, Republican legislators became notably more misaligned with their constituents, while Democratic legislators became somewhat more aligned. Unlike in the past, there now *is* a clear partisan asymmetry in alignment, with Democratic legislators more accurately reflecting voters' preferences than their Republican counterparts.¹⁵¹

Turning to alignment at the *collective* level, Figure 3's first chart indicates its values for all states and over all available years. The distribution is surprisingly balanced; there are almost exactly as many states where the median legislator is too liberal for the median voter as there are where she is too conservative. Another intriguing pattern is the tendency of states governed by Democrats to have overly liberal

148. For data on polarization in state legislatures, see McGhee et al., *supra* note 7, at 342, and Shor & McCarty, *supra* note 8, at 546.

149. This conclusion is bolstered by the earlier finding that state legislators typically are more extreme than their constituents. See *supra* note 147 and accompanying text. However, the relationship between polarization and misalignment likely is more complex than a simple correlation and warrants further investigation.

150. We do not have enough voting record data from the 2013 sessions to produce reliable estimates for legislators elected in 2012.

151. This result is confirmed by another recent study of alignment, which also found that today's Republican state legislators are more ideologically distant from their constituents than are Democratic representatives. See Shor, *supra* note 32, at 11–15. However, the trends in polarization, at least at the national level, are quite different. Republican members of Congress have been growing steadily more conservative since the late 1970s, while their Democratic colleagues have been growing slightly more liberal for about half a century. Nothing in particular changed in 2006. See *The Polarization of the Congressional Parties*, VOTEVIEW (Jan. 19, 2014), http://www.voteview.org/political_polarization.asp, archived at <http://perma.cc/F4PW-E79S>.

median legislators (e.g., California, Connecticut, Massachusetts), and of Republican-run states to have overly conservative median members (e.g., Michigan, Missouri, Ohio). It is possible that a party's control of the legislature is associated with a sort of over-reaction, in which the median member veers further in the party's direction than the median voter would like.¹⁵²

The distribution for chamber-level responsiveness, depicted in Figure 3's second chart, is not as symmetric. In general, the median legislator has been either moderately sensitive to changes in the statewide presidential vote (in the states on the right side of the chart) or largely insensitive (in the states on the center-left). But in a handful of outliers (e.g., Georgia, Indiana, Missouri), the median legislator has been *negatively* responsive; as public opinion swings one way, she has moved in the opposite direction. Also notable is the lack of correlation between alignment and responsiveness at the chamber level. States with high alignment scores do not stand out for their responsiveness, nor do states with high responsiveness scores stand out for their alignment. Indeed, the state with the lowest responsiveness in the country, Georgia, has been one of the best in terms of alignment.

Lastly, Figure 4's two charts present the trends in chamber-level alignment and responsiveness over the last two decades.¹⁵³ (There are fewer data points in the second chart because, as noted earlier, we use only presidential election years and ensuing legislative sessions to calculate responsiveness.¹⁵⁴) Unlike with district-level alignment, no obvious patterns are discernible in these charts. If one squints, the median legislator seems too conservative in the 1990s, too liberal in the 2000s, and too conservative again today, but the deviations are quite small. Responsiveness also has hovered around almost exactly the same value for the entire period of our analysis. At least at this level of aggregation, state legislative representation in America appears remarkably static.

152. See Shor, *supra* note 32, at 16 (finding that "Republican-held chambers are more conservative than state opinion, while Democratic-held chambers are mostly, but not always, more liberal than their states"); cf. Lax & Phillips, *supra* note 32, at 157 (observing a similar pattern with respect to *outcome* alignment).

153. Again, we have too little voting record data to show results for 2012/2013. See *supra* note 150.

154. See *supra* notes 138–39 and accompanying text.

Figure 2: District-Level Alignment by State and over Time

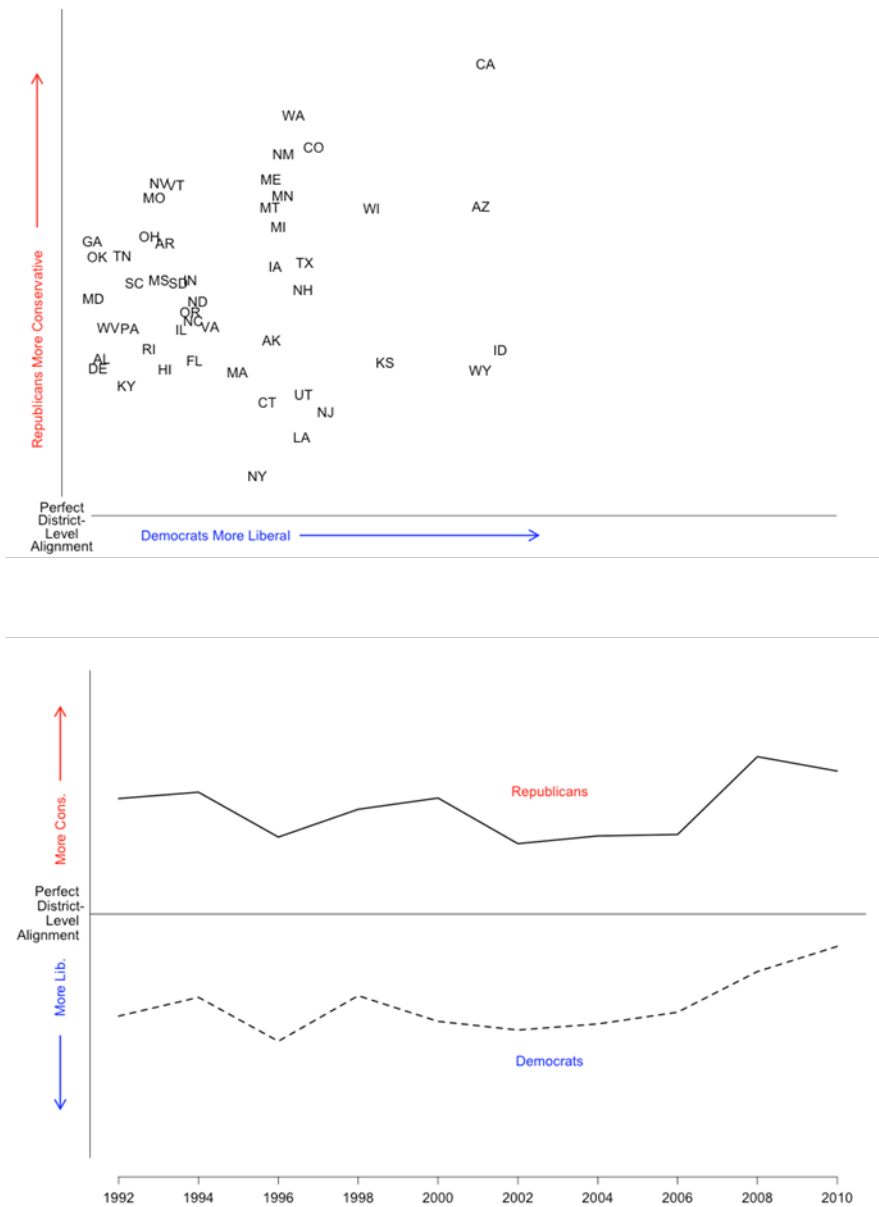


Figure 3: Chamber-Level Alignment and Responsiveness by State

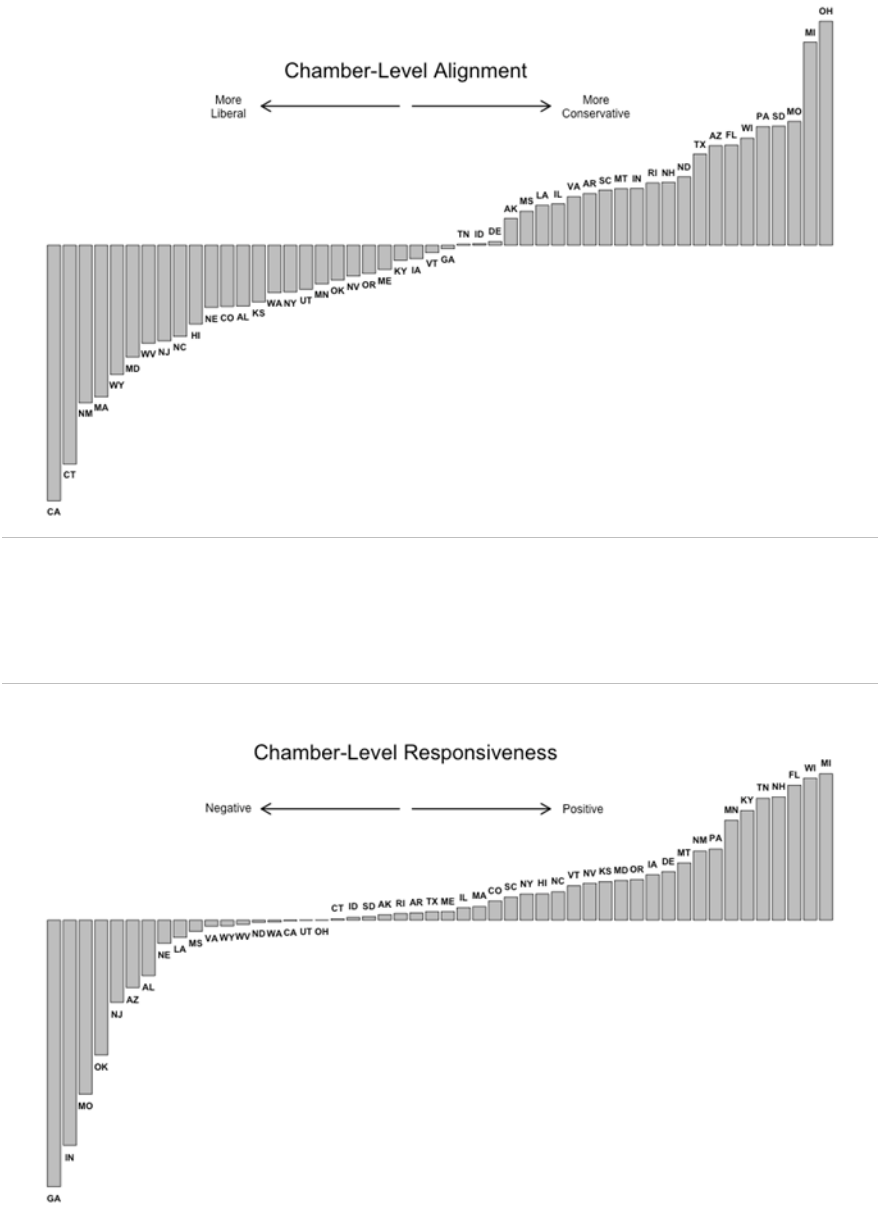
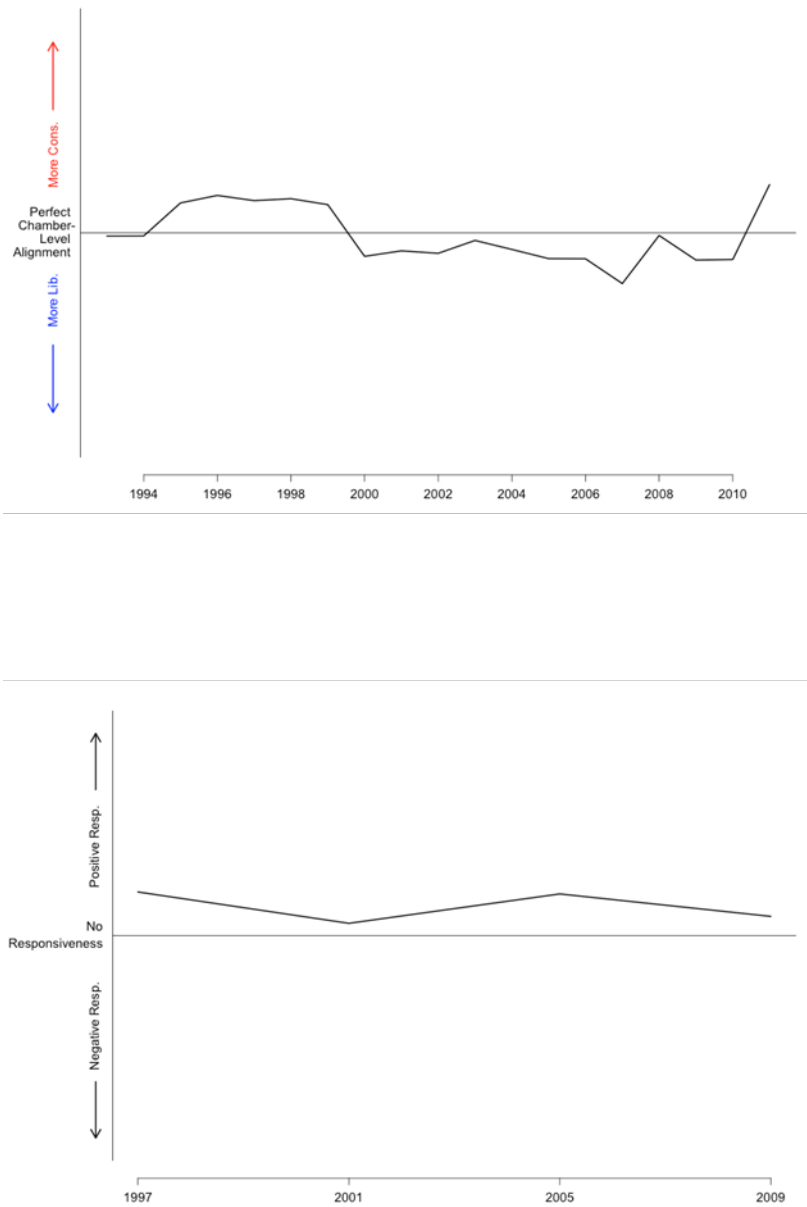


Figure 4: Chamber-Level Alignment and Responsiveness over Time



2. Franchise Access

Having presented the summary statistics for alignment and responsiveness, we now proceed to the key question that this Article seeks to answer: how representation is *affected* by different electoral policies. We begin our discussion with laws that alter people's access to the franchise. These laws include both measures that make it more difficult to vote (such as identification requirements, proof-of-citizenship requirements, and the disenfranchisement of felons) and measures that make voting easier (such as early voting and same-day registration).¹⁵⁵

In the literature, photo-identification requirements are the most thoroughly studied of these policies, and the prevailing view is that they have only a marginal impact on the parties' electoral performances.¹⁵⁶ A plausible hypothesis, then, is that the requirements also have little effect on the electorate's *policy* views, and so little effect on representation. Scholars have found as well that the adoption of same-day registration produces a mild pro-Democratic swing, while early voting and felon disenfranchisement modestly benefit Republicans.¹⁵⁷ Since these policies do seem to have partisan consequences, it is reasonable to expect them to influence representation too. If the electorate's partisan preferences change because of the policies, it would not be surprising for its policy preferences to shift in tandem.

Unfortunately, we cannot use the presidential vote here to measure constituent opinion. Franchise access policies, unlike all the other laws we study, affect who votes in the first place (rather than how legislators represent their constituents). It thus is illogical to examine the policies' impact on the representation of actual voters. The whole point of the policies is that they may change who these voters are. In place of the presidential vote, then, we use the Tausanovitch and Warshaw scores, which capture the ideology of *citizens* rather than of *voters*.¹⁵⁸ Since franchise access policies do not affect citizenship, they *are* capable of influencing how citizens are represented. The policies are endogenous to the electorate but exogenous to the citizenry as a whole.

155. See *supra* note 124 and accompanying text (describing franchise access policies in our database).

156. See *supra* note 40 and accompanying text.

157. See *supra* notes 41–43 and accompanying text.

158. See Tausanovitch & Warshaw, *supra* note 6, at 330–31 (noting that their “supersurvey” includes “275,000 citizens in all 50 states”). Our use of the Tausanovitch and Warshaw scores means that, in this part, we are studying the representation of the median *citizen*, not the median *voter*. See Stephanopoulos, *supra* note 3, at 325 (noting that franchise access restrictions can produce “divergence between the median actual voter and the median eligible voter who would have gone to the polls in the absence of the restrictions”).

While the Tausanovitch and Warshaw scores make it possible to assess franchise access policies, they have the drawback of being available only for the 2004–2011 period in its entirety.¹⁵⁹ We therefore are limited to studying district-level and chamber-level alignment during this timespan. We also cannot study responsiveness at all, because we have no change over time in our measure of constituent opinion.¹⁶⁰ Despite these constraints, we believe the analysis we carry out is quite valuable. Franchise access policies have attracted a good deal of attention in recent years, but their implications for representation have yet to be examined.

As shown in Figure 5, then,¹⁶¹ we find that the restrictive policies in our database have ambiguous effects on district-level and chamber-level alignment. At the district level, strict requirements for nonphoto identification are misaligning for Democrats, while proof-of-citizenship requirements are aligning for them. At the chamber level, strict requirements for photo identification are misaligning, flexible requirements for nonphoto identification are weakly misaligning,¹⁶² and flexible requirements for photo identification are aligning. Our findings are more intelligible for policies that expand access to the franchise. None of these policies has a significant impact at the chamber level, while early voting is aligning for both Democrats and Republicans at the district level.

On balance, these results support the hypothesis that identification requirements have a minor impact on representation. Just as they barely alter the parties' vote shares, so too do they have either unclear effects or none at all on district-level and chamber-level alignment. However, the measures' chamber-level consequences provide some cause for concern (or, at least, further study). While the relevant coefficients do not all point in the same direction, they do suggest that identification requirements are more likely to be misaligning than aligning. Perhaps the requirements produce noncongruence that is too minor to register at the district level, but that aggregates into more substantial misalignment at the chamber level.

The results also bolster the hypothesis that early voting influences representation. The practice is linked to improved alignment

159. See Tausanovitch & Warshaw, *supra* note 6, at 332.

160. See *supra* note 137 and accompanying text (explaining that responsiveness cannot be calculated unless measures of constituent and legislator opinion both vary over time).

161. We use coefficient charts rather than data tables to present the results of all of our regressions. The dot for each policy represents its regression coefficient, while the lines to each side indicate the standard errors (at the 5% significance level).

162. We refer to effects as “weak” when they are significant only at the 10% level. For details on different identification requirements, see *Voter Identification Requirements*, *supra* note 124.

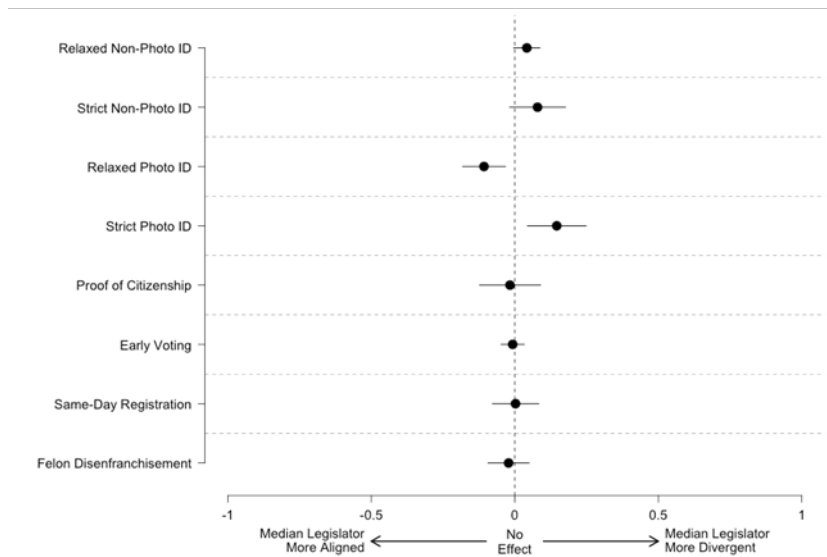
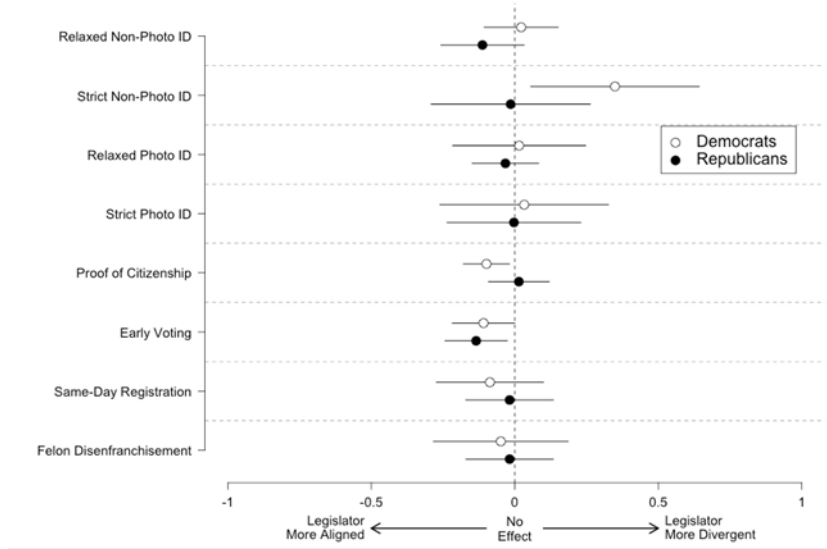
for both Democrats and Republicans at the district level (though not at the chamber level). A possible explanation is that early voting increases turnout and so shrinks the gap between the median actual voter (to whom legislators may be especially attentive) and the median citizen included in Tausanovitch and Warshaw's surveys. In other words, early voting may make the median citizen more electorally significant to legislators, and so motivate them to better align their positions with hers.¹⁶³

However, the results do *not* substantiate the hypotheses that same-day registration and felon disenfranchisement have significant impacts on representation. These measures do not influence alignment by either Democrats or Republicans at either the district or chamber levels. Why not? With respect to same-day registration, one possibility is that the voters who take advantage of the policy are more likely to be Democrats, but not more likely to be liberals. The *partisanship* of the median voter thus might shift even as her *ideology* remains constant.¹⁶⁴ And with respect to felon disenfranchisement, opinion surveys tend to exclude felons from their coverage.¹⁶⁵ So felons' views likely are omitted from the Tausanovitch and Warshaw scores that serve here as our benchmark of constituents' preferences.

163. Though this hypothesis would not explain why early voting has a partisan valence in favor of Republicans. *See supra* note 42 and accompanying text.

164. *Cf.* Burden et al., *supra* note 41, at 6–7 (observing that franchise access policies have various electoral and ideological effects that interrelate in complex ways).

165. *See* Daniel Horn, Survey Research on the Political and Economic Attitudes of Felony Offenders in North Carolina 1 (2012) (unpublished paper) available at <http://www.eventscribe.com/2012/ASAH2R/assets/pdf/49962.pdf>, archived at <http://perma.cc/V4HC-9CJV> ("Felon populations are generally excluded from social and economic surveys distributed both nationally and sub nationally.").

Figure 5: Franchise Access Regression Results

3. Party Regulation

We look next at regulations of political parties: measures that specify the type of primary a party must hold or that restrict candidates' access to the ballot itself. Our database includes several kinds of more inclusive primaries (semi-closed, semi-open, open, and nonpartisan),¹⁶⁶ as well as one ballot access requirement: sore loser laws, which ban candidates who lose in the primaries from running again in the general election.¹⁶⁷ As noted earlier, the literature on primary type is mixed, with studies coming to different conclusions as to whether it is linked to legislative polarization.¹⁶⁸ In contrast, the lone study on sore loser laws found that they increase polarization.¹⁶⁹ Assuming that representation and polarization are negatively related,¹⁷⁰ we are left with no clear hypothesis as to the impact of primary type on alignment and responsiveness. But we might expect sore loser laws to cause scores on both metrics to decline.

Unlike in the previous section,¹⁷¹ here there is no obstacle to using the presidential vote as our measure of voters' preferences. To the extent party regulations affect representation, they do so by changing the stances taken by legislators—not by altering the general electorate.¹⁷² Since the presidential vote varies over time, we thus are able to analyze both alignment and responsiveness in this domain. The same is true for all of the other issue areas we cover, and so, for the sake of brevity, we do not mention our data usage again.

As Figure 6 illustrates, we find, on the whole, that more inclusive primaries either do not influence representation or actually make it worse. Semi-closed, semi-open, open, and nonpartisan primaries all are misaligning for Democrats at the district level. Nonpartisan primaries also weakly reduce responsiveness at the chamber level (though they are aligning for Republicans at the district level). We further find that sore loser laws are aligning for both Democrats and Republicans at the district level. The provisions are aligning at the chamber level as well.

166. The details of the different primary types are not important here, but they are covered in depth in McGhee et al., *supra* note 7, at 339–41.

167. See *supra* note 125 and accompanying text (describing party regulations in our database).

168. See *supra* notes 44–49 and accompanying text.

169. See *supra* note 44.

170. See *supra* notes 147–48 and accompanying text (discussing summary statistics that provide support for this assumption).

171. See *supra* Part III.C.2.

172. Though different primary types obviously alter the *primary* electorate—indeed, that is their essential aim. One thus could not use primary election results to study the impact of primary type on the representation of the primary electorate.

Our results provide strong support for the more skeptical side of the debate over primary type. This camp contends that more inclusive primaries either have no impact on polarization or in fact are polarizing.¹⁷³ Likewise, we find that these policies are neutral at best in terms of representation, and quite harmful at worst. Why do more inclusive primaries not attract more moderate voters and so result in more centrist candidates winning their parties' nominations? A large political science literature offers several answers.¹⁷⁴ The primary electorate does not vary much by primary type; primary voters do a poor job distinguishing between centrist and extreme candidates; and the donors and activists who drive campaigns view extremism (on their own side of the aisle) as a virtue, not a vice.¹⁷⁵ Our results do not shed light on which of these mechanisms is most potent. But any of them would explain why more inclusive primaries fail to live up to their advocates' hopes.

As for our finding that sore loser laws improve alignment, it is squarely at odds with the hypothesis that they worsen representation. One reason for the discrepancy may be that our analysis is at the state legislative level, while the earlier work on the provisions examined their impact on *congressional* polarization. But even if sore loser laws are polarizing at the state legislative level too, it might be possible, at least in theory, for them simultaneously to be aligning.

Take a heavily conservative district in a state without a sore loser law, and suppose that the loser in the Republican primary decides to run again in the general election. Suppose also that, with two Republicans splitting their party's vote, a moderate Democrat squeaks to victory. Then substantial misalignment ensues between the Democrat and the district's conservative median voter. But the Democrat likely *reduces* polarization by occupying the ideological center of the legislature. If this scenario is plausible, then it is not hard to see how a sore loser law would increase both alignment and polarization. The law would prevent the mismatch between the moderate Democrat and the conservative median voter. But it also would negate the Democrat's centripetal influence in the legislature.¹⁷⁶ Further research

173. See *supra* note 46 and accompanying text.

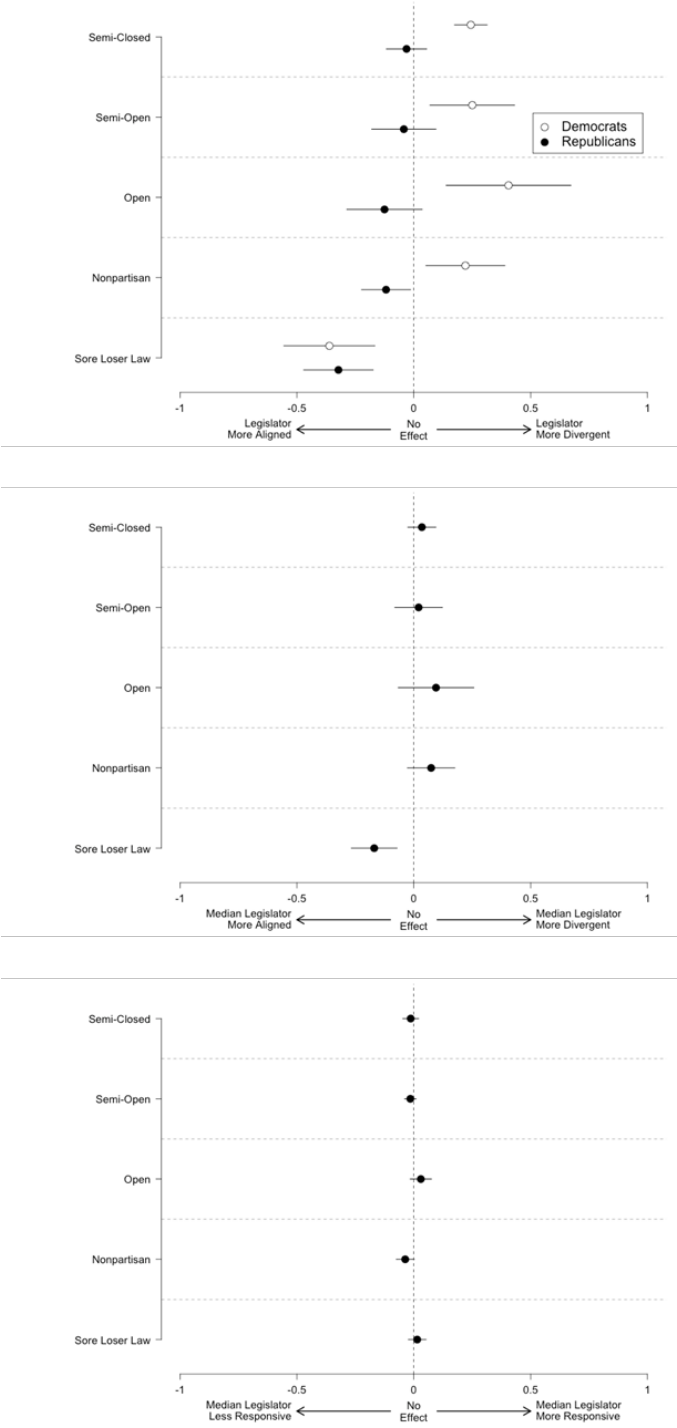
174. See McGhee et al., *supra* note 7, at 338–39 (discussing this literature at length).

175. See *id.*

176. The same analysis, of course, applies if a moderate *Republican* squeaks to victory in a heavily *liberal* district in the absence of a sore loser law. We also are aware that sore loser laws may have different electoral consequences in different kinds of districts. For more on these provisions, see generally Michael S. Kang, *Sore Loser Laws and Democratic Contestation*, 99 GEO. L.J. 1013 (2011).

is necessary, of course, to determine if these effects are more than mere conjecture.

Figure 6: Party Regulation Regression Results



4. Campaign Finance

Campaign finance regulations are the third type of policy in our database, and they can be subdivided further into three groups: limits on contributions (by individuals, corporations, unions, or PACs), bans on expenditures (by corporations or unions),¹⁷⁷ and public financing schemes of varying generosity.¹⁷⁸ A set of very recent studies assess these policies' effects on polarization, generating a series of hypotheses for us to test.¹⁷⁹ First, the studies find that individual donors are ideologically extreme and that limits on individual contributions reduce polarization.¹⁸⁰ So we also might expect these limits to increase alignment and responsiveness.¹⁸¹ Second, the studies find that public financing schemes are polarizing because the public funds typically are tied to the receipt of donations from extreme individual donors.¹⁸² So we might expect these schemes to worsen representation. And third, the studies find that most PACs are relatively moderate and that limits on PAC donations increase polarization.¹⁸³ So we might expect these limits to worsen representation as well.

As Figure 7 indicates, limits on individual contributions improve district-level alignment for both Democrats and Republicans, but are weakly misaligning at the chamber level. Limits on corporate contributions are misaligning for Republicans at the district level, but weakly increase chamber-level responsiveness. Bans on corporate spending are weakly aligning for Republicans at the district level, and aligning at the chamber level. Limits on union contributions are aligning for Republicans at the district level. PAC limits weakly reduce chamber-level responsiveness. And partial public financing is

177. These bans are no longer constitutional after *Citizens United v. FEC*, 558 U.S. 310, 361–62 (2010).

178. See *supra* note 126 and accompanying text (describing campaign finance regulations in our database). The vast majority of states have disclosure requirements as well. We omit these requirements from our analysis because they are ubiquitous and because we do not expect them to have any connection to alignment or responsiveness.

179. See *supra* notes 55–56 and accompanying text; see also Stephanopoulos, *supra* note 50 (manuscript at 42–48) (discussing these studies in depth). We focus on the polarization studies rather than the literature on the partisan effects of campaign finance regulations, see *supra* notes 50–52 and accompanying text, because they are related more closely to our subject matter of representation.

180. See *supra* notes 55, 58, and accompanying text.

181. The reason for this expectation is, again, the apparent negative relationship between polarization and representation. See *supra* notes 148–49 and accompanying text.

182. See *supra* note 58.

183. See *supra* notes 57–58 and accompanying text. Unfortunately, the polarizing effects of limits on *corporate* or *union* contributions have yet to be investigated. The literature thus does not give rise to any hypotheses on these limits' implications for alignment and responsiveness.

misaligning for both Democrats and Republicans at the district level, while full public financing is misaligning for Republicans at the district level.

These results are consistent (for the most part¹⁸⁴) with our hypotheses as to how individual contribution limits and public financing affect representation. Individual limits reduce polarization and, as expected, improve alignment. When legislators' ideal points shift toward the center after donations from extreme individual donors are curbed, the outcomes are a smaller gap between the parties at the legislative level—and a smaller gap between legislators and their constituents at the district level. Similarly, public financing exacerbates polarization and, as expected, worsens alignment. Candidates' need to raise money from extreme individual donors, in order to qualify for public funds, motivates them to migrate toward the ideological fringes. The consequences are a more polarized legislature as well as legislators who are less aligned with their constituents.

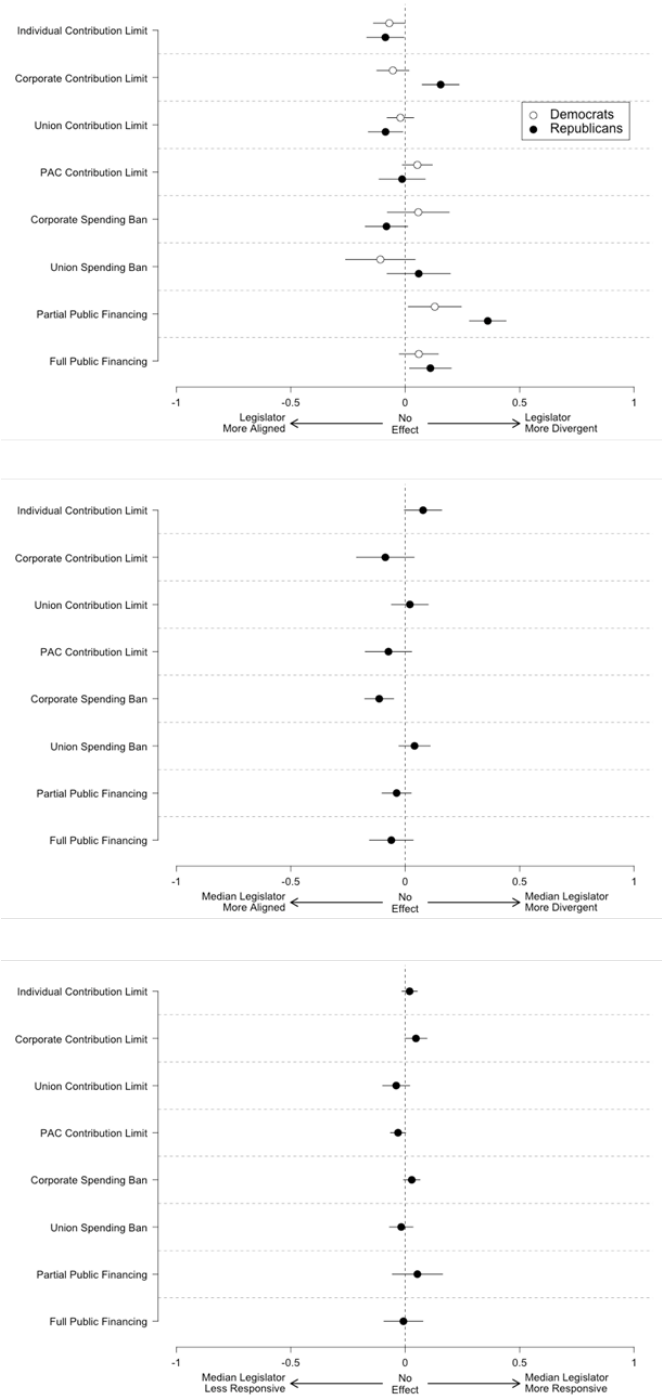
On the other hand, our findings provide scant support for the hypothesis that PAC limits worsen representation. The coefficients for these measures do not rise to statistical significance in any of our alignment models, and only weakly suggest a decline in responsiveness. Since past studies conclude that PAC limits are only *modestly* polarizing,¹⁸⁵ these marginal results are not overly surprising. We also had no a priori expectations as to the effects of corporate or union restrictions¹⁸⁶—but if we had, they would not have been confirmed by our equivocal outcomes. In the models in which they are significant, corporate contribution limits worsen district-level alignment for Republicans but weakly improve responsiveness; while in the models in which they are significant, corporate spending bans boost district-level alignment for Republicans and chamber-level alignment. Likewise, union limits rise to statistical significance in just one of our models (Republican district-level alignment). Corporate and union restrictions plainly are worth further study, but for now the safest conclusion is that their implications for representation remain uncertain.

184. The main exception is our finding that individual limits are misaligning at the chamber level. Because this finding is relatively weak (with significance only at the 10% level), and is contradicted by our district-level results, we put relatively little stock in it.

185. See Barber, *supra* note 55, at 38 (finding that effects of PAC limits on polarization are substantially smaller than those of individual limits).

186. See *supra* note 183.

Figure 7: Campaign Finance Regression Results



5. Redistricting

Redistricting is our fourth issue area, and it includes two kinds of policies: line-drawing criteria (compactness, respect for political subdivisions, respect for communities of interest, respect for prior district cores, and incumbent protection) and line-drawing institutions (legislature, independent commission, or court).¹⁸⁷ As to criteria, the existing literature is inconclusive but suggests that their effects may vary by electoral level. At the district level, requirements such as compactness and respect for political subdivisions may improve representation by making constituencies more intelligible to voters and legislators.¹⁸⁸ But at the chamber level, these criteria may weaken representation by increasing the likelihood of plans that favor a particular party: the Republicans, whose supporters usually are distributed more efficiently when the criteria are satisfied.¹⁸⁹ As to institutions, past studies find that commissions and courts tend to enact fairer and more competitive plans than legislatures.¹⁹⁰ So we might expect these bodies to be linked to heightened chamber-level alignment and responsiveness as well.

As Figure 8 shows, compactness is aligning for both Democrats and Republicans at the district level, and misaligning at the chamber level. Respect for political subdivisions is aligning for Republicans but misaligning for Democrats at the district level, and also weakly increases chamber-level responsiveness. Respect for prior district cores is weakly aligning for Democrats at the district level, and misaligning at the chamber level. Incumbent protection is misaligning for Democrats at the district level, and weakly aligning at the chamber level. Commission usage is misaligning for Democrats and Republicans at the district level, and aligning at the chamber level. And court usage is aligning for Democrats at the district level.

On balance, these results are consistent with the hypothesis that redistricting criteria improve representation at the district level but weaken it at the chamber level. Compactness and respect for prior district cores fit this narrative especially well, as they both increase district-level but reduce chamber-level alignment. In contrast, the story

187. *See supra* note 127 and accompanying text (describing redistricting policies in our database). We also include the presence of divided government in our models, but do not discuss it further since it is not an actual policy choice.

188. *See supra* notes 64–67 and accompanying text; *see also* Nicholas O. Stephanopoulos, *Redistricting and the Territorial Community*, 160 U. PA. L. REV. 1379, 1471–72 (2012) (discussing relevant studies).

189. *See supra* notes 64–67 and accompanying text.

190. *See supra* notes 61–63 and accompanying text.

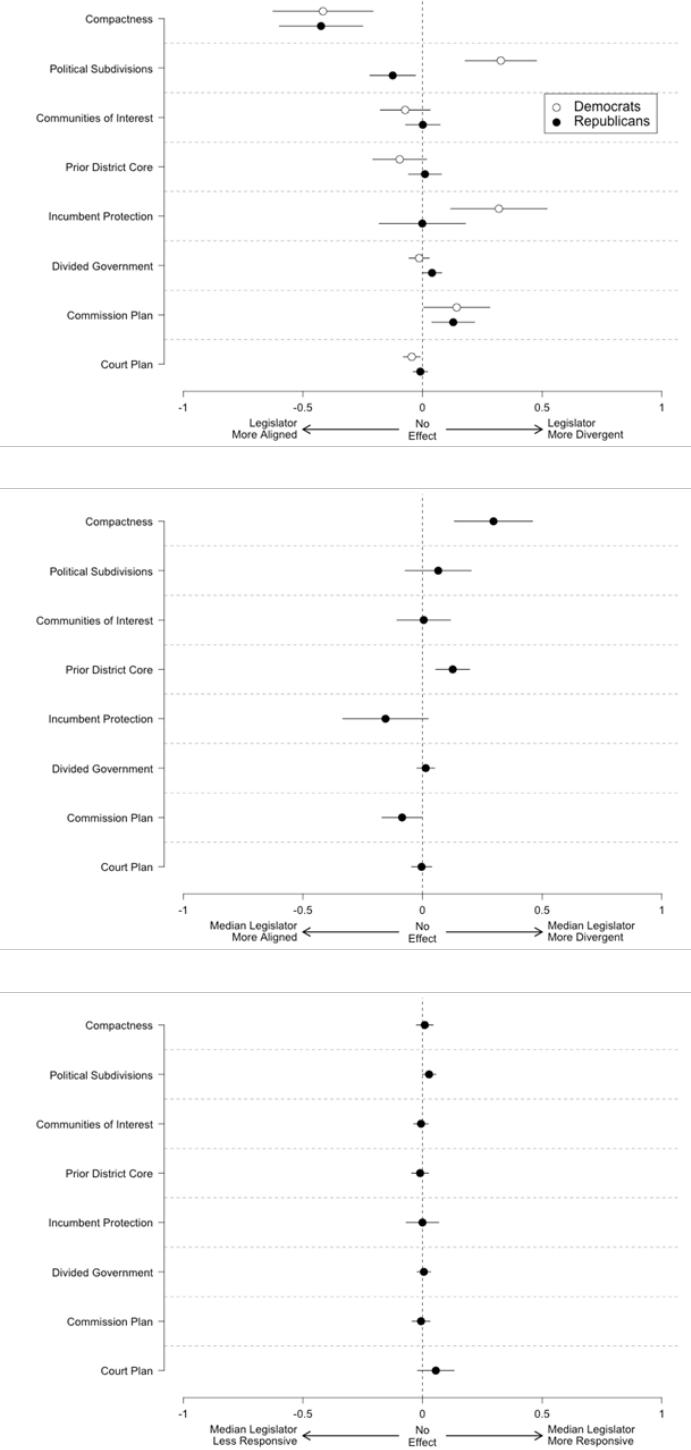
is more ambiguous for requirements such as respect for political subdivisions and incumbent protection. To the extent the narrative holds, it reveals yet another tradeoff in a domain that already is full of them. By adhering to traditional criteria when they craft districts, line-drawers promote closer alignment between voters and their individual representatives—a laudable goal. But in so doing, line-drawers often produce a *divergence* between the state’s median voter and the chamber’s median legislator—an obviously unwelcome outcome. Whether to employ traditional criteria turns out to be a Hobbesian choice.

Fortunately, the institutional question is not as vexing. The results support the hypothesis that independent commissions (though not courts¹⁹¹) improve representation at the chamber level. District plans drawn by commissions indeed feature higher levels of chamber-level alignment than plans drawn by the elected branches. This finding means that the benefits of commissions are not limited to the fairer conversion of the parties’ votes into legislative seats.¹⁹² Rather, the benefits extend to the congruence of the pivotal legislator with the state’s median voter. Institutional choice makes a substantive difference.

191. We also are unsure what to make of our district-level findings that commissions are misaligning for Democrats and Republicans and courts are aligning for Democrats. We had no hypotheses as to these institutions’ district-level effects, but they are worth further investigation.

192. *See supra* notes 61–63 and accompanying text (noting that redistricting by commissions improves responsiveness).

Figure 8: Redistricting Regression Results



6. Governmental Structure

Our fifth and final set of policies relate to governmental structure generally rather than election law specifically. These measures include the availability of the voter initiative, the ability to recall legislators, the presence of legislative term limits, and the level of legislative professionalism.¹⁹³ Of these policies, the voter initiative is the most extensively researched.¹⁹⁴ But the prior literature on the initiative's effects on alignment and responsiveness is indeterminate,¹⁹⁵ leaving us with no clear hypothesis as to its impact on representation. The literature on term limits and legislative professionalism is mixed as well (though mildly positive),¹⁹⁶ and no study to date has examined the link between the legislator recall and representation. We thus have no strong expectations as to these policies' consequences either.

As Figure 9 illustrates, the voter initiative is misaligning for Democrats at the district level, and aligning at the chamber level. It also reduces chamber-level responsiveness. The legislator recall is misaligning at the chamber level. Term limits are misaligning for both Democrats and Republicans at the district level. And legislative professionalism is misaligning for Democrats at the district level.

These results tend to bolster the pessimistic position in the debate over the voter initiative. While we do find that the initiative is aligning at the chamber level, we also find that it is misaligning for Democrats at the district level and reduces chamber-level responsiveness. We cannot conclude that the initiative improves representation overall, especially since we have no theoretical reason to discount the adverse findings. Apparently, the mechanism through which the initiative is said to boost alignment and responsiveness—legislators voting in accordance with their constituents' views in order to avoid reversal by referendum¹⁹⁷—operates rather fitfully.

The results also help resolve the dispute over the representational effects of term limits. At the district level, both Democrats and Republicans are somewhat more misaligned with their constituents in states that limit legislative terms. Our models do not explain *why* term limits exert this negative influence on alignment. But

193. See *supra* note 128 and accompanying text (describing governmental structure provisions in our database).

194. See *supra* notes 68–70 and accompanying text.

195. See *id.*

196. See *supra* note 71 and accompanying text.

197. See Lax & Phillips, *supra* note 32, at 158 (observing that the threat of being overruled “may then spur elected officials to make changes in their policy choices as a means of avoiding a ballot measure”).

they do suggest that the critics' claims—that term limits prevent legislators from developing valuable expertise and reduce their incentives to attend closely to their constituents—are more persuasive than the rejoinders.¹⁹⁸

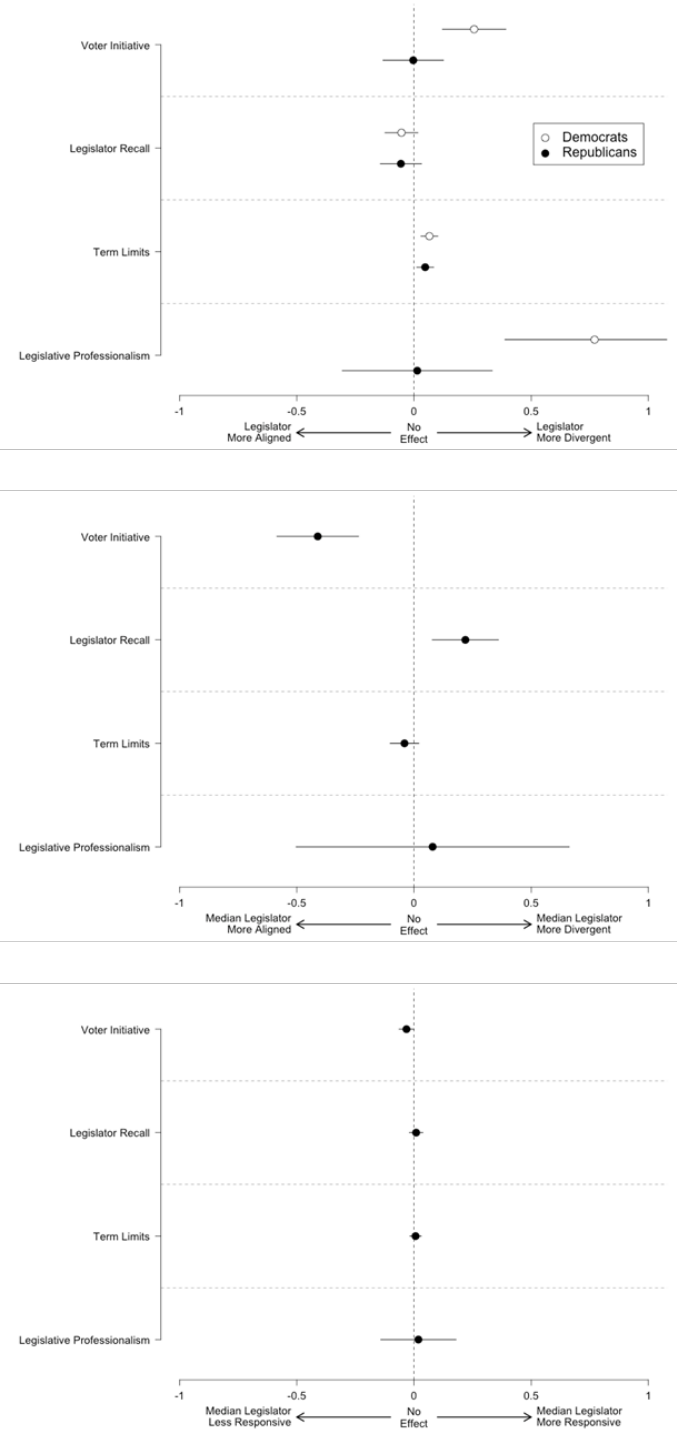
Lastly, the results are no help to backers of greater legislative professionalism either. Democrats are more misaligned with their constituents in states with more professional legislatures, while professionalism has no impact in any of the other models. How might legislative professionalism reduce district-level preference alignment while perhaps increasing chamber-level outcome alignment (as the literature hints)?¹⁹⁹ The question requires further study, but one possibility is that parties in states with more professional legislatures are more disciplined and more motivated to attain (and retain) majority status.²⁰⁰ Such parties might pressure legislators to cast votes that are out of sync with the legislators' own constituents, but that are congruent with the views of the *state's* median voter. In this way, the parties simultaneously would promote district-level misalignment and chamber-level alignment.

198. See Lynda W. Powell et al., *Constituent Attention and Interest Representation*, in *INSTITUTIONAL CHANGE IN AMERICAN POLITICS: THE CASE OF TERM LIMITS* 38, 38–39 (Karl T. Kurtz et al. eds., 2007) (discussing reasons why term limits might improve or weaken representation).

199. See *supra* note 71 and accompanying text.

200. See Lax & Phillips, *supra* note 32, at 158 (noting that “[s]eats in professional chambers are also more valuable”).

Figure 9: Governmental Structure Regression Results



7. Electoral Policies in Combination

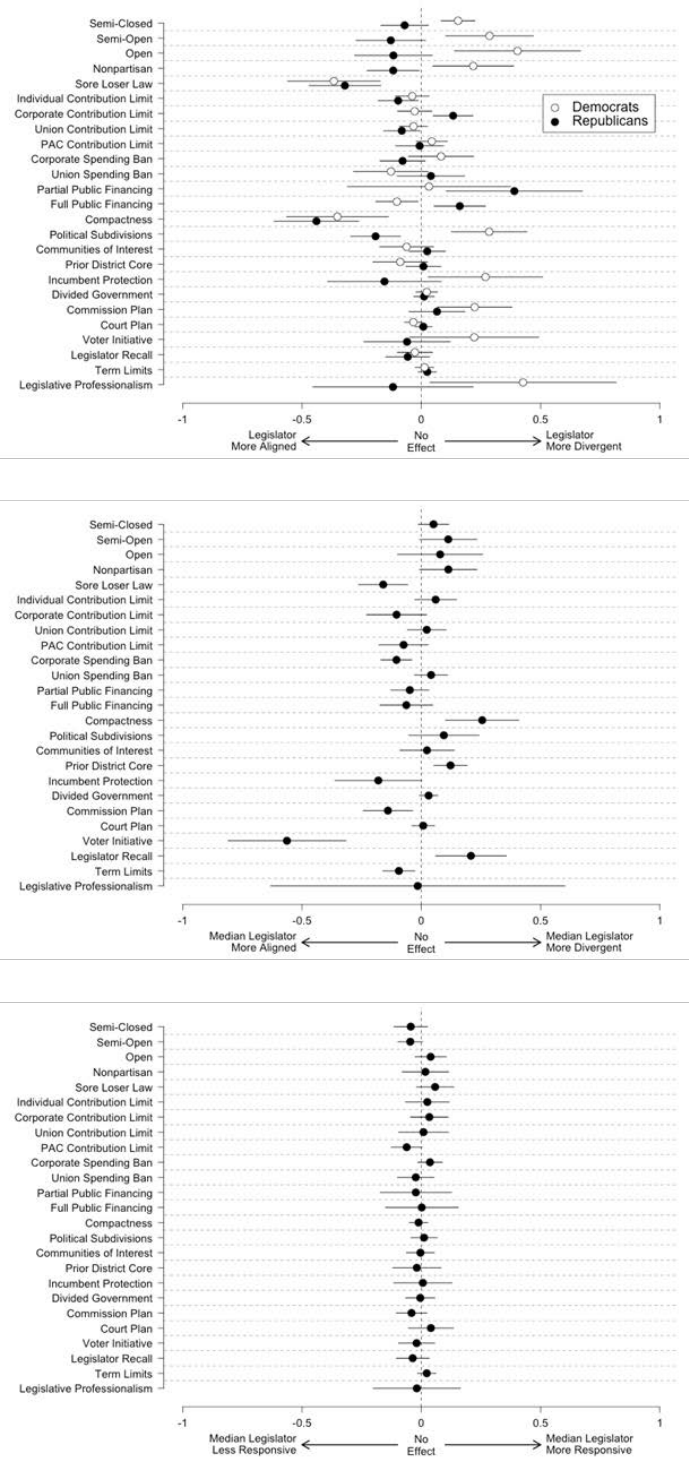
We conclude this Part by examining most of the electoral policies in our database in unison. These sorts of “kitchen sink” models serve as robustness checks for our earlier results, while also illuminating the operations of states’ electoral systems in their full complexity. To avoid overwhelming readers with extraneous detail, we focus on the key points that emerge from these broader models. We also omit franchise access policies from our analysis because, as noted above, they cannot be assessed using the presidential vote.²⁰¹

Beginning with party regulations, we find that they have largely the same effects that we identified previously. As Figure 10 indicates, more inclusive primaries have no impact or worsen alignment or responsiveness in most models, while sore loser laws are aligning at both the district and chamber levels. It is worth noting, though, that semi-open and nonpartisan primaries now are slightly *aligning* for Republicans at the district level. It thus is possible that these measures’ consequences vary by party. Next, our findings for campaign finance regulations also hold steady for the most part. Individual contribution limits remain aligning for Republicans at the district level, though they no longer rise to statistical significance for Democrats. Similarly, both types of public financing continue to be misaligning for Republicans at the district level. However, full public financing now is *aligning* for Democrats at the district level.

Third, our results for redistricting policies essentially are unchanged from before. Line-drawing criteria such as compactness again are aligning at the district level and misaligning at the chamber level. (Though the district-level effects no longer register for respect for prior district cores.) Likewise, the use of independent commissions to draw district lines again improves chamber-level alignment. Lastly, the kitchen sink models require us to amend some of our assessments of governmental structure provisions. The voter initiative no longer worsens alignment at the district level or responsiveness at the chamber level, but remains aligning at the chamber level. So its impact on representation may be more positive than we surmised earlier. Analogously, term limits no longer are misaligning at the district level and indeed are mildly *aligning* at the chamber level. So their influence also may be more beneficial than we suggested previously.

201. See *supra* notes 158–59 and accompanying text.

Figure 10: Electoral Policies Regression Results



8. Robustness Checks

While the kitchen-sink models are our most important robustness checks, we also validate our results in four additional ways. First, we rerun our responsiveness models using different dependent and independent variables.²⁰² Specifically, we use the change in the median legislator ideal point divided by the change in the statewide presidential vote as the dependent variable, and the electoral policies themselves (not their interactions with the change in the statewide presidential vote) as the independent variables.²⁰³ This approach makes responsiveness itself the dependent variable, and it means that the policies' coefficients can be interpreted as their direct effects on responsiveness. The approach also confirms that electoral reforms have next to no impact on responsiveness. In all of these models, not a *single* policy attains statistical significance. Responsiveness thus seems almost impossible to influence no matter how it is measured.

Second, we exclude from our district-level alignment analysis states for which our estimates of the presidential vote aggregated by state legislative districts are less accurate.²⁰⁴ In their work on using county-level election results to approximate district-level results, Carl Klarner and Lockwood Reynolds conclude that the procedure is substantially less reliable in states whose county-district "concordance" is 0.25 or below.²⁰⁵ We thus remove these largely northeastern states (Arizona, Connecticut, Delaware, Hawaii, Maine, Massachusetts, Nevada, New Hampshire, Rhode Island, Utah, and Vermont) from our database,²⁰⁶ and we then rerun our district-level alignment models. Our results are largely unchanged. In fact, almost all of the coefficients are similarly signed and sized, and the only notable differences are that open primaries now are aligning for Republicans, individual contribution limits no longer are aligning for Republicans, commission usage no longer is misaligning for Republicans, and the legislator recall

202. The results of all of the models discussed in this part are available on request.

203. For more information on our baseline responsiveness specification, see *supra* notes 137–39, 144, and accompanying text.

204. As noted earlier, we obtained actual presidential election results aggregated by state legislative district for some states and years and had to estimate them for others. See *supra* notes 107–10 and accompanying text.

205. See Klarner & Reynolds, *supra* note 110, at 10 fig.1 (showing that correlation between estimated and actual district-level results falls below 0.7 when concordance is 0.25 or below). "Concordance" is a quantitative measure of "correspondence between state legislative and county lines." *Id.* at 3.

206. See *id.* at 8 tbl.1 (listing states by average county-district concordance over 1968–2010 period).

now is aligning for Democrats. Given the large number of policies in the models, these strike us as fairly minor variations.

Third, to ensure that our findings are not being driven by slight policy differences, we consolidate our array of reforms into the following categories: all franchise restrictions (identification requirements, proof-of-citizenship requirements, and felon disenfranchisement); all franchise expansions (early voting and same-day registration); all open primaries (semi-closed, semi-open, open, and nonpartisan); all organizational campaign finance limits (on corporations, unions, and PACs); all public financing (partial and full); all constraining redistricting criteria (compactness and respect for political subdivisions, communities of interest, and prior district cores); all independent redistricting institutions (commissions and courts); and all structural limits on the legislature (voter initiative, legislator recall, and term limits). We then rerun our models with these broader policy groupings as the key independent variables.

Our results paint a familiar picture. For example, franchise restrictions continue to have ambiguous effects at the district level, while franchise expansions continue to be aligning for both parties. Similarly, the records of open primaries and public financing remain poor, worsening alignment at the district level. And redistricting criteria continue to be misaligning at the district level too. On the other hand, organizational campaign finance limits now seem more attractive, improving alignment at the district level for Democrats and at the state level. But independent redistricting institutions now seem less appealing, with no significant impacts in any of the models. The overall substantive story thus changes only modestly when we shift from dozens of individual policies to a handful of policy categories.

Lastly, we replicate the alignment analysis recently carried out by Shor using same-scale data for voters' and legislators' preferences.²⁰⁷ Our rationale for the replication is that if we obtain similar results using our regression residual technique, then it must make little difference whether representation is studied using same-scale data or regression residuals. Shor's dependent variable is the distance of each party's median member in each state legislative chamber from the state's mean voter in 2008.²⁰⁸ His independent variables are the ideology of the median Republican member, chamber competitiveness, district magnitude, the use of a traditional party organization, and three electoral policies that we previously coded: the voter initiative,

207. See Shor, *supra* note 32, at 19–23.

208. See *id.* at 19.

term limits, and legislative professionalism.²⁰⁹ We also are able to code Shor's remaining independent variables. And we substitute our regression residual measure for Shor's dependent variable, this time calculated only for 2008 and for *parties'* rather than *chambers'* median members.

Like Shor, we find that median Republican ideology is strongly associated with greater party median misalignment.²¹⁰ Our confirmation of this "by-now familiar result" is quite encouraging.²¹¹ Also like Shor, we find that use of a traditional party organization is linked to a significant improvement in alignment, and that the voter initiative, term limits, and legislative professionalism do not reach customary levels of statistical significance.²¹² However, Shor concluded that chamber competitiveness "very slightly" improves alignment, while we discern no such effect.²¹³ Shor also concluded that district magnitude worsens alignment, while it does not attain significance in our model.²¹⁴ Still, the similarities between our analysis and Shor's are much more conspicuous than the differences. They lead us to the conclusion that, indeed, representation may be evaluated effectively using our regression residual technique.

* * *

Having reviewed the results of our various models and robustness checks, it is worth reiterating that they are suggestive rather than definitive. More work is needed to determine with sufficient confidence how electoral policies affect representation in contemporary America. Indeed, in the above discussion we have tried to flag areas in which our conclusions are more tentative,²¹⁵ and below we describe several worthwhile sequels to this Article that would add to the reliability of our findings.²¹⁶ But it also is important to stress that our results *are* the product of a rigorous research design that comes close to allowing truly causal claims to be made.²¹⁷ The results certainly can be

209. *See id.* at 19–20.

210. *See id.* at 23.

211. *Id.* at 20.

212. *See id.* at 23. Legislative professionalism is significant at the 10% level in our model, in the same misaligning direction as in Shor's. *See id.*

213. *Id.* at 20. In fact, chamber competitiveness is significant at the 10% level in a misaligning direction in our model.

214. *See id.* at 23.

215. *See supra* notes 149, 176, 186, 191, 200, and accompanying text.

216. *See infra* Part IV.C.

217. *See supra* Part III.B.

refined (and we hope they will be), but they are robust enough already to give rise to clear implications for courts, policymakers, and academics. It is to these implications that we turn in the next Part.

IV. IMPLICATIONS

Beginning with courts, then, our findings are most useful in cases where parties argue explicitly that challenged policies should be upheld because of their positive effects on representation. Such cases arise with some regularity, and our findings give courts the necessary tools to assess claims of this sort. More ambitiously, to the extent that courts are persuaded by either the alignment or responsiveness theories, our results permit them to start putting the theories into operation. Case outcomes would shift substantially in some areas if courts were to focus on representational impact (e.g., campaign finance and redistricting), while they would be largely unaffected in others (e.g., franchise access and party regulation).

Next, our results have even plainer implications for policymakers. If they agree that alignment and responsiveness are compelling values, they should enact policies that promote them and repeal policies that undermine them. In brief, this would mean passing sore loser laws, early voting, individual contribution limits, and independent redistricting commissions; and eliminating public financing schemes, term limits, and inclusive primaries. Lastly, our findings hold different lessons for political scientists and law professors (our two academic audiences). For political scientists, this project gives rise to an exciting new research agenda. There are many ways to test and extend our analyses, all of them worth pursuing. For law professors, our results offer the first practical assessment of a pair of theories that lie at the heart of election law. Our results also suggest that, whatever the normative appeal of the responsiveness theory may be, its real-world applications are quite limited.

A. Courts

It is fair to ask whether our findings are relevant at all to courts. The judiciary, it goes without saying, is not known for its interest in complex empirical analysis. We believe our findings *are* relevant for two reasons. First, parties in litigation sometimes assert that disputed policies should be sustained because of their positive impact on representation. In these cases, courts need some way to assess the validity of these claims. Second, courts often have expressed interest in the alignment and responsiveness theories (and have been urged by

commentators to commit to them more fully).²¹⁸ Because it is plausible that courts one day might implement these theories, it is important to know how the face of election law would change as a result.

Jurisdictions have defended policies on the ground that they improve representation in several kinds of cases. In litigation over ballot access requirements (such as sore loser laws), for example, jurisdictions have argued that they “ensure that a minority of voters do not thwart the will of the majority.”²¹⁹ That is, the provisions allegedly prevent the misalignment that ensues if a minor candidate qualifies for the ballot and then receives enough votes to change the election’s outcome. Similarly, in cases involving more inclusive primaries, jurisdictions have claimed that they make candidates “more responsive to the views and preferences of the electorate.”²²⁰ The measures ostensibly shift primary voters toward the ideological center and encourage candidates to follow suit. And in campaign finance cases, jurisdictions have contended that regulations induce officeholders to “decide issues [based on] . . . the desires of their constituencies” and not “according to the wishes of those who have made large financial contributions.”²²¹ Regulations, in other words, are said to tether politicians’ voting records to their constituents’ preferences.

In all of these cases, the parties’ arguments force courts to confront difficult empirical questions. How often do sore loser laws prevent wrong-winner outcomes? Do candidates become more responsive to voters when more inclusive primaries are adopted? Do campaign finance regulations make it more likely that officeholders will heed their constituents’ wishes? Courts need to answer these questions to determine whether the policies in fact advance the interests asserted by the jurisdictions. But to date, courts have had little to go on beyond anecdotal evidence, self-serving testimony, and their own intuitions. In its ballot access cases, for instance, the Supreme Court has not referred to any data on the frequency of wrong-winner outcomes. Likewise, in the Court’s inclusive primary cases, an expert report on congressional

218. For discussions of the role that alignment and responsiveness have played in the Supreme Court’s existing doctrine, see Issacharoff, *supra* note 1, at 605–06 and Stephanopoulos, *supra* note 3, at 316–20.

219. *Williams v. Rhodes*, 393 U.S. 23, 56 (1968) (Stewart, J., dissenting); *see also, e.g.*, *Bullock v. Carter*, 405 U.S. 134, 145 (1972) (noting jurisdiction’s argument that ballot access requirement “seeks to . . . assure that the winner is the choice of a majority”).

220. *Cal. Democratic Party v. Jones*, 530 U.S. 567, 586 (2000) (Kennedy, J., concurring); *see also, e.g.*, *Tashjian v. Republican Party of Conn.*, 479 U.S. 208, 221 (1986) (noting jurisdiction’s argument that open primary would help candidates “appeal to the independent voter”).

221. *McConnell v. FEC*, 540 U.S. 93, 153 (2003); *see also, e.g.*, *Nixon v. Shrink Mo. Gov’t PAC*, 528 U.S. 377, 389 (2000) (noting jurisdiction’s argument that contribution limits address “broader threat from politicians too compliant with the wishes of large contributors” (citation omitted)).

polarization is the only relevant evidence that has been cited.²²² And no study of how representation is affected by money in politics has yet appeared in the Court's decisions.

Now, however, rigorous social scientific results are available that bear directly on these issues. Thanks to our study, courts no longer need to *guess* what the representational effects are of sore loser laws, inclusive primaries, campaign finance regulations, and the like. Instead, courts may consult this Article's findings—and, we hope, additional findings that other scholars will produce in the near future—and assess with more confidence how electoral rules influence alignment and responsiveness. In our view, this analysis marks a milestone for cases in which improved representation is the state interest submitted to justify a policy. This is an intrinsically empirical sort of interest, and now it indeed can be assessed empirically.

While our results are most helpful in situations where litigants refer overtly to gains in representation, they also have potentially broader implications. In particular, were courts ever to heed scholars' calls to adopt the alignment or responsiveness theories, then representational impact would be a crucial issue in *every* electoral dispute—not only when raised by a party.²²³ Then every case would hinge not on the balancing of rights and countervailing interests, but rather on a policy's effects on alignment and responsiveness. What might election law look like if such a transformation were to occur? Below we consider each of our five issue areas in turn, painting with a broad brush because doctrinal details are not our main concern here.

First, the law of franchise access would change only modestly. The highest-profile contemporary restrictions, identification requirements for voting, generally have been upheld by courts, including in a pair of Supreme Court decisions.²²⁴ These provisions also likely would be sustained by courts committed to the alignment or responsiveness theories. As discussed above, the laws' representational effects are small and somewhat ambiguous.²²⁵ Courts would not be able to *commend* identification requirements, but they also would not be in

222. See *Jones*, 530 U.S. at 580. This report notably did *not* address representation at the state legislative level.

223. See *supra* Part II.A (discussing structural theories that urge courts to replace rights-and-interests balancing with direct consideration of underlying representational values).

224. See *Crawford v. Marion Cnty. Election Bd.*, 553 U.S. 181, 204 (2008) (upholding Indiana photo identification-law); see also *Purcell v. Gonzalez*, 549 U.S. 1, 6 (2006) (permitting Arizona identification law to be used in upcoming election).

225. See *supra* Part III.C.2. Though if further study indicates that identification requirements in fact are misaligning at the chamber level (as our results hint), then the measures should be scrutinized much more closely.

a position to strike them down due to their harmful consequences. Neutrality would be the appropriate judicial posture. On the other hand, courts might be more skeptical of cutbacks to early voting (which they typically have permitted to date²²⁶). Since early voting improves district-level alignment,²²⁷ its curtailment probably runs afoul of the alignment theory.

Second, the Court's party regulation doctrine would shift even less. In a 2000 case, the Court struck down California's blanket primary and criticized more inclusive primaries that are unwanted by the parties themselves.²²⁸ Such primaries also would be viewed suspiciously by courts applying the alignment theory. At both the district and chamber levels, these measures worsen alignment (especially for Democrats) or, at best, leave it unchanged.²²⁹ Similarly, the Court upheld sore loser laws in the one case it took in which they were challenged.²³⁰ These provisions also would be sustained under the alignment or responsiveness theories, since they improve alignment at the district and chamber levels while having no impact on responsiveness.²³¹

Third, the law of campaign finance would undergo substantial modification. The Court has voided certain limits on donations from individuals to candidates,²³² as well as *aggregate* limits on individual giving in an entire election cycle.²³³ But individual contribution limits improve alignment for both Democrats and Republicans at the district level.²³⁴ So courts likely would approve them under the alignment theory. Conversely, the Court recently nullified Arizona's public

226. See, e.g., N.C. State Conf. of NAACP v. McCrory, 997 F. Supp. 2d 322, at 375 (M.D.N.C. 2014) (upholding cutback to early voting in North Carolina); Brown v. Detzner, 895 F. Supp. 2d 1236, 1256 (M.D. Fla. 2012) (denying plaintiffs injunctive relief upon finding of lack of discriminatory motivation for statute curtailing early voting in Florida).

227. See *supra* Part III.C.2. However, early voting does not affect chamber-level alignment. See *supra* Part III.C.2.

228. See Cal. Democratic Party v. Jones, 530 U.S. 567, 586 (2000).

229. Nonpartisan primaries are the one exception, as they improve Republican district-level alignment. See *supra* Part III.C.3.

230. See *Storer v. Brown*, 415 U.S. 724, 746 (1974).

231. See *supra* Part III.C.3.

232. See *Randall v. Sorrell*, 548 U.S. 230, 262–63 (2006) (voiding Vermont's individual contribution limit).

233. See *McCutcheon v. FEC*, 134 S. Ct. 1434, 1462 (2014) (plurality opinion) (voiding federal aggregate contribution limit). The Court also has struck down limits on individual *expenditures*. See *Buckley v. Valeo*, 424 U.S. 1, 39–51 (1976).

234. See *supra* Part III.C.4. On the other hand, they are weakly misaligning at the chamber level. See *id.*

financing system because it tried to equalize candidate spending.²³⁵ Public financing schemes also would be at risk under the alignment theory since they worsen alignment for both Democrats and Republicans at the district level.²³⁶ As for the Court's landmark 2010 decision eliminating corporate and union spending bans,²³⁷ it resists assessment from a representational perspective. Spending bans have ambiguous effects on alignment and responsiveness, so it is not yet possible to reach conclusions about their validity.²³⁸

Fourth, the Court's redistricting doctrine would change markedly as well. The Court tends to valorize traditional line-drawing criteria. Compliance with them is necessary to prevail in a Voting Rights Act suit,²³⁹ and deviations from them are probative both of invidious racial intent²⁴⁰ and, according to some Justices, unlawful partisan gerrymandering.²⁴¹ But while these criteria commonly improve alignment at the district level, they more often worsen it at the chamber level.²⁴² Courts thus would not afford them such positive treatment under the alignment theory. Likewise, the Court has declined to urge jurisdictions to adopt independent redistricting commissions in its partisan gerrymandering cases.²⁴³ But since these commissions improve chamber-level alignment,²⁴⁴ their enactment would be a higher judicial priority under the alignment theory.

Finally, courts are asked only rarely to determine the lawfulness of governmental structure provisions such as the voter initiative, the legislator recall, and term limits. The alignment and responsiveness

235. See *Ariz. Free Enter. Club's Freedom Club PAC v. Bennett*, 131 S. Ct. 2806, 2829 (2011); cf. *Davis v. FEC*, 554 U.S. 724, 745 (2008) (nullifying Millionaires' Amendment that aimed to equalize spending by changing contribution limits for candidates facing wealthy opponents).

236. See *supra* Part III.C.4. However, neither form of public financing influences chamber-level alignment. See *id.*

237. See *Citizens United v. FEC*, 558 U.S. 310, 359 (2010).

238. See *supra* Part III.C.4. We are similarly unable to reach firm conclusions about the validity of corporate and union *contribution limits*, the effects of which also are ambiguous. See *supra* Part III.C.4.

239. See *Thornburg v. Gingles*, 478 U.S. 30, 50 (1986) (making geographic compactness a prerequisite for claims under Section 2 of Voting Rights Act).

240. See, e.g., *Bush v. Vera*, 517 U.S. 952, 959–60 (1996) (plurality opinion); *Miller v. Johnson*, 515 U.S. 900, 916–20 (1995).

241. See, e.g., *Vieth v. Jubelirer*, 541 U.S. 267, 347–50 (2004) (Souter, J., dissenting); *Davis v. Bandemer*, 478 U.S. 109, 176–77 (1986) (Powell, J., concurring in part and dissenting in part).

242. See *supra* Part III.C.5. This account holds most clearly for compactness and respect for prior district cores. See *supra* Part III.C.5.

243. Indeed, the only opinion to have discussed commissions at any length was Justice Breyer's dissent in *Vieth*. See 541 U.S. at 362–63 (Breyer, J., dissenting) (noting use of commissions by “a number of States”).

244. See *supra* Part III.C.5. On the other hand, commissions are misaligning at the district level. See *supra* Part III.C.5.

theories therefore would have limited judicial applications in this domain. However, in a 1995 case, the Supreme Court did hold that term limits for congressional candidates are invalid because they are not mentioned by the Constitution itself.²⁴⁵ This outcome is consistent with the alignment theory's prescriptions. Since term limits worsen alignment for both Democrats and Republicans at the district level,²⁴⁶ courts should disfavor the measures on representational grounds.

We reiterate that we are offering only a preliminary sketch of how courts might operationalize the alignment and responsiveness theories. It goes without saying that our results must be confirmed by other scholars before they can be relied on in litigation. It also goes without saying that the judicial inquiry under the theories cannot be as crude as simply voiding all policies with adverse representational effects and upholding all policies with neutral or positive effects. Representational impact must be combined with other valid considerations—existing precedent, judicial capacity, compelling nonrepresentational values, and so forth—to craft workable doctrine. Accordingly, the above discussion should be construed as a preview of how election law doctrine might operate if the alignment or responsiveness theories ever became ascendant. But it is only that: a preview, not a definitive account.

B. Policymakers

While a doctrinal revolution would have to take place before *courts* could embrace the alignment or responsiveness theories, no such pyrotechnics are necessary for them to be adopted by *policymakers*. Legislators, executives, and bureaucrats who are attracted to the representational values that underpin the theories simply could start enacting beneficial regulations and repealing harmful ones. What might a policy agenda aimed at optimizing representation look like? Below we offer a tentative first draft.

We begin with the beneficial policies, ordered based on our confidence in their effects. First, sore loser laws are the measures that most consistently improve representation in our models, boosting alignment at both the district and chamber levels.²⁴⁷ The relatively few states that lack them thus should give serious thought to passing them. Second, early voting increases alignment at the district level while

245. See *U.S. Term Limits, Inc. v. Thornton*, 514 U.S. 779, 837–38 (1995).

246. See *supra* Part III.C.6. However, term limits do not affect chamber-level alignment. See *supra* Part III.C.6.

247. See *supra* Part III.C.3.

leaving it unchanged at the chamber level.²⁴⁸ It also should be a high priority for representationally minded policymakers. Third, individual contribution limits raise alignment at the district level but weakly lower it at the chamber level.²⁴⁹ In our view, the stronger district-level effects outweigh the weaker chamber-level impact and justify the enactment of these limits. And fourth, independent redistricting commissions worsen district-level alignment but improve it at the chamber level.²⁵⁰ Since the point of commissions is to make district plans fairer in their entirety, we think the chamber-level result is more important and supports the bodies' adoption.

Next we consider the harmful policies, again arranged according to the reliability of our findings. First, public financing systems are misaligning in three out of four district-level models, though they have no significant impact at the chamber level.²⁵¹ The adverse district-level effects are enough to persuade us that these systems should be rethought (though not necessarily rejected altogether²⁵²). Second, term limits also are misaligning at the district level and neutral at the chamber level.²⁵³ The district-level consequences again lead us to believe that representation would be enhanced by amending or repealing these provisions. And third, more inclusive primaries all worsen Democratic district-level alignment, and one of them, the nonpartisan primary, reduces responsiveness too.²⁵⁴ But the nonpartisan primary also increases Republican district-level alignment.²⁵⁵ On balance, these measures do weaken representation, but the case against them is not airtight (and it also does not extend to *other* kinds of primary reform²⁵⁶).

This leaves us with a hodgepodge of policies whose effects are either mixed (identification requirements, corporate and union

248. *See supra* Part III.C.2.

249. *See supra* Part III.C.4.

250. *See supra* Part III.C.5.

251. *See supra* Part III.C.4.

252. It is only speculation at this point, but there is reason to suppose that New York City's multiple-match system *improves* alignment by attracting a donor pool that closely resembles the city's population as a whole. *See* Stephanopoulos, *supra* note 50, at 47–48 (discussing relevant studies).

253. *See supra* Part III.C.6.

254. *See supra* Part III.C.7.

255. *See supra* Part III.C.6.

256. *See, e.g.,* SETH E. MASKET, NO MIDDLE GROUND: HOW INFORMAL PARTY ORGANIZATIONS CONTROL NOMINATIONS AND POLARIZE LEGISLATURES (2011) (explaining how California candidates' ability to cross-file in multiple parties' primaries dramatically reduced legislative polarization). Another reform that likely would be aligning would be eliminating the primary altogether and allowing voters to choose among *all* candidates in the general election (perhaps via instant-runoff voting).

restrictions, traditional redistricting criteria, the voter initiative, and the legislator recall) or neutral (same-day registration, felon disenfranchisement, and PAC contribution limits).²⁵⁷ With respect to these policies, we cannot recommend that they be enacted by states that lack them or eliminated by states that employ them. Representational impact simply is not a useful metric for assessment here. At least until further evidence is available, we thus advise policymakers to consider these measures from perspectives other than their implications for alignment and responsiveness.

As before, a host of caveats must be appended to this analysis. Our results require further validation before they can serve as a foundation for actual legislation. Even selfless policymakers care about values other than representation, and there is no guarantee that these values will point in the same directions as alignment and responsiveness. And many policymakers are self-*interested* rather than selfless. These individuals actively may oppose measures that improve representation—and hence pressure them to take stances they would rather avoid. All of these points have merit, and their upshot is that the above policy agenda is necessarily provisional.

C. Academics

Academics are the final group for whom this Article has important implications. The main interest of political scientists is likely to be methodological. All of the datasets we employ—voters' preferences, legislators' preferences, and electoral policies—can be refined in various ways, as can be our calculations of alignment and responsiveness. Political scientists probably will want to probe our techniques (and results) to see if they stand up to scrutiny. On the other hand, we expect the response of law professors to be more theoretically inclined. Like courts and policymakers, they may be curious about the representational effects of different reforms. They also may want to know what our findings mean for the validity of the alignment and responsiveness theories. In our view, our analysis tends to bolster the former theory and to undermine the latter.

Starting with technical refinements, we can think of ways to improve all of our datasets and calculations. These improvements would go far in making our results dependable enough for use by courts and policymakers. First, with respect to voters' preferences, it would be desirable to have a *direct* measure of their policy views that *changes* over time. Our usual metric, the presidential vote, only indirectly

257. See *supra* Part III.C.2–7.

captures voters' policy attitudes;²⁵⁸ while the Tausanovitch and Warshaw scores, which are drawn from opinion surveys, are temporally static.²⁵⁹ Perhaps the same statistical method that produces the Tausanovitch and Warshaw scores could be used to generate a dynamic measure of public opinion. (Though this would entail at least some loss of accuracy due to the smaller number of survey respondents in each individual year.²⁶⁰)

Second, with respect to legislators' preferences, our analysis is hamstrung by the unavailability of reliable ideal points that vary over time. Had such ideal points existed, we would have been able to include *all* legislators, not just newly elected ones, in our alignment models, and we would have been able to examine responsiveness at the district level too.²⁶¹ Unfortunately, the accuracy of the Bonica scores, which are dynamic, probably cannot be improved since the number of campaign contributions received by each candidate cannot be increased.²⁶² But it should be possible to produce a dynamic version of the Shor and McCarty scores, as the analogous NOMINATE scores for members of Congress are available in both static and dynamic forms.²⁶³ Time-variant ideal points for state legislators would enable further breakthroughs in the study of state legislative representation.

Third, with respect to the electoral policies in our database, we coded almost all of them in binary fashion, simply noting whether or not they were used by each state in each year.²⁶⁴ This approach could be improved by placing certain laws on a *continuous* spectrum. For example, contribution limits could be assessed based on their dollar values,²⁶⁵ early voting could be gauged based on the number of days the polls are open, and so forth. Even more ambitiously, certain laws could be coded according to their *effects* rather than their *existence*. For instance, the actual compactness of a state's districts could be

258. See *supra* notes 106–07 and accompanying text.

259. See *supra* notes 103–05 and accompanying text.

260. Most of the individual surveys used by Tausanovitch and Warshaw had between 30,000 and 80,000 respondents. These are large enough numbers for public opinion estimates to be computed for most (but probably not all) state legislative districts. See Tausanovitch & Warshaw, *supra* note 6, at 332.

261. See *supra* Part III.B.

262. See *supra* notes 119–21 and accompanying text.

263. See *Description of NOMINATE Data*, VOTEVIEW (July 13, 2004), <http://www.voteview.com/page2a.htm>, archived at <http://perma.cc/GK48-28PY> (explaining differences between D-NOMINATE, W-NOMINATE, and DW-NOMINATE scores, all of which are derived from congressional roll call votes).

264. See *supra* notes 122–28 and accompanying text. The one exception is legislative professionalism, which is coded on a continuous scale. See *supra* Part III.C.6.

265. For an example of a study taking this approach, see Barber, *supra* note 55, at 30–31.

considered instead of the presence of a compactness requirement, or the use of the legislator recall instead of its mere availability. It would not be surprising if a more sophisticated treatment of policies yielded more robust results.

Lastly, alignment and responsiveness can be calculated in several ways, and it would be helpful to know whether our findings are sensitive to our choice of techniques. As long as voters' and legislators' preferences are on different scales, an alternative to our regression residual approach is to *rescale* the preferences so they have the same distributions. Then voters' and legislators' scores simply can be compared to one another to determine their proximity.²⁶⁶ Another option (though not one that can be applied retrospectively) is to survey voters using questions that their legislators already have answered through their roll call votes. Then common-space ideal points can be produced for voters and legislators, allowing alignment to be computed directly, without any rescaling or residuals.²⁶⁷ And we have limited ourselves in this Article to *temporal* responsiveness, but the concept also can be understood *spatially*. It would be interesting to find out how legislator ideology changes as voter ideology shifts from district to district (not from year to year).²⁶⁸

These refinements are very important, and we plan to implement several of them in the near future (hopefully joined by other scholars). But legal academics likely are less interested in methodological details, and more concerned about the substantive and theoretical implications of our analysis. We already have covered the substantive lessons in our discussions of courts and policymakers, and do not repeat them here.²⁶⁹ At a theoretical level, the first key point is that the alignment and responsiveness theories indeed can be made empirically useful. To date, these theories have operated on a relatively abstract plane—exalting certain representational values, criticizing approaches that neglect these values, and offering few specific

266. For an example of a study taking this approach, see Griffin, *supra* note 131, at 10–11. We prefer our regression residual approach because it does not make arbitrary assumptions about how voters' or legislators' preferences are distributed.

267. For examples of studies taking this approach, see *supra* note 132 and accompanying text. This method requires the resources to conduct large enough surveys to generate voter ideal points at the desired electoral levels. It also can be used only to investigate current (as opposed to historical) representation.

268. For examples of studies examining spatial responsiveness, see Griffin, *supra* note 137, at 913–15; and Tausanovitch & Warshaw, *supra* note 69, at 17–20. As noted earlier, we focus on temporal responsiveness because it corresponds better to the value animating the Issacharoff and Pildes theory. See *supra* note 137.

269. See *supra* Part IV.A–B.

prescriptions.²⁷⁰ But now the theories can begin providing *practical* benefits to a range of actors: to judges who want to decide cases in accordance with them, to leaders who hope to enact sound policies, and, yes, to legal academics who would like to argue with facts and not just norms. Now the theories have progressed from the conceptual to the concrete.

By shedding empirical light on normative issues, this Article is the latest in a long line of election law scholarship. As Pamela Karlan has explained, it is common in the field for courts (or academics) to announce a sweeping new principle, and then for social scientists to step into the breach to operationalize it.²⁷¹ This is what happened after the Supreme Court enshrined the one-person, one-vote rule in the 1960s; the calculation of malapportionment began at once.²⁷² It also is what took place after the Court made racial polarization in voting the linchpin of Voting Rights Act claims in the 1980s; empiricists rushed to compute polarization in elections throughout the country.²⁷³ The same sequence is unfolding here. Academics have asserted that the central concern of election law should be the impact of different rules on alignment and responsiveness. And this Article, for the first time, tries to put some empirical meat on these normative bones.

The second key point for law professors is that the alignment and responsiveness theories are *not* equivalent from a practical standpoint. Many electoral policies have positive or negative effects on alignment—for both Democratic and Republican legislators, at both the district and chamber levels.²⁷⁴ In contrast, almost *no* policies have any influence on responsiveness. In all of the domain-specific models we ran, only a single reform, the voter initiative, had a statistically significant impact, and even this result evaporated in the kitchen-sink model.²⁷⁵ On the whole, it is fair to say that responsiveness does not budge in either direction due to the policies with which states experiment. It is serenely impervious to reform.

270. See *supra* notes 1–3 and accompanying text.

271. See Pamela S. Karlan, *Answering Questions, Questioning Answers, and the Roles of Empiricism in the Law of Democracy*, 65 STAN. L. REV. 1269, 1272 (2013) (“[L]egal doctrine has asked a series of questions that social scientific methods are well positioned to answer.”).

272. See *id.* at 1272–73.

273. See *id.* at 1273–76.

274. See *supra* Part III.C.2–7.

275. See *supra* Part III.C.2–7. A few more policies attained statistical significance at the 10% level in at least one of our models: the semi-open primary, the nonpartisan primary, corporate contribution limits, PAC contribution limits, and respect for political subdivisions. See *supra* Part III.C.2–7; see also Tausanovitch & Warshaw, *supra* note 69, at 20–25 (also finding that institutions have little impact on responsiveness at municipal level).

Why is this the case? The third chart in Figure 1, showing change in median legislator ideal point versus change in the statewide presidential vote, provides at least a partial explanation.²⁷⁶ As the chart illustrates, there is almost no relationship between the two variables. Sometimes when a state's electorate shifts in a Republican direction, the pivotal legislator becomes more conservative. But sometimes the pivotal legislator becomes more liberal, and even more often her ideology does not change at all. Weak and erratic responsiveness is the norm, at least at the chamber level. Given this reality, it is not overly surprising that very few policies have significant effects on responsiveness. It simply is too low and too unpredictable to be influenced much by reform.

It is possible that this picture would change if responsiveness could be analyzed at the district level.²⁷⁷ Perhaps the far larger number of districts (relative to chambers) would permit the impact of different policies to be detected more clearly.²⁷⁸ For the time being, however, our conclusion is that the responsiveness theory is much less useful than the alignment theory. Unlike the alignment theory, it cannot be relied upon to distinguish between sound and unsound policies, or between doctrines that should be kept and ones that should be discarded. If nothing affects responsiveness, then nothing can be praised for heightening it or criticized for dampening it. To be clear, this is a *practical* objection to the responsiveness theory, not a *normative* one. The representational ideal may well be a legislator whose positions shift swiftly in response to changes in public opinion. But this ideal is not much help if there is no way to promote it or to undercut it.

V. CONCLUSION

The most notable development in election law over the last generation has been the emergence of the responsiveness and alignment theories. These theories reject conventional rights-and-interests balancing in favor of direct examination of electoral policies' implications for key representational values. But, until now, the theories have been seriously deficient. They have provided no way for

276. The second chart in Figure 4, showing the trend in chamber-level responsiveness over time, largely confirms this interpretation. Responsiveness barely shifts from year to year, suggesting it is mostly immune to changes in the electoral environment. *See supra* fig. 4.

277. It also is possible that the picture would change if a reliable time-variant measure of legislator ideology were available. Our use of a time-invariant measure biases our responsiveness scores toward zero.

278. With respect to alignment, notably, we obtained more significant results in our district-level models than in our chamber-level ones.

anyone to *tell* how reforms affect responsiveness and alignment. They have been caught in clouds of abstraction.

This Article is an attempt to rectify this flaw. For the first time, we computed responsiveness and alignment scores for many states over many years, and catalogued all of the electoral policies in effect during this period. We then explored how the policies actually influence responsiveness at the chamber level and alignment at both the district and chamber levels. Our results hold valuable lessons for courts, policymakers, and academics. Even more importantly, they make it possible to begin operationalizing the theories—to begin converting what have been purely normative contentions into practical guidance for interested parties. We recognize that more work remains to be done before a topic as complex as representational impact is understood fully. But the Article still takes a useful first step in this direction. It starts to pull the theories down from the clouds.

VI. APPENDIX

**Table A1. Franchise Access and Alignment:
District-Level Results**

	Democrats		Republicans	
	β	S.E.	β	S.E.
Intercept	0.52***	0.16	0.64***	0.12
Relaxed Nonphoto ID	0.02	0.06	-0.11	0.07
Strict Nonphoto ID	0.35*	0.15	-0.01	0.14
Relaxed Photo ID	0.02	0.12	-0.03	0.06
Strict Photo ID	0.03	0.15	0.00	0.12
Proof of Citizenship	-0.10*	0.04	0.01	0.05
Early Voting	-0.11*	0.05	-0.13*	0.05
Same-Day Registration	-0.09	0.09	-0.02	0.08
Felon Disenfranchisement	-0.05	0.12	-0.02	0.08
State Fixed Effects?	Yes		Yes	
Year Fixed Effects?	Yes		Yes	
RMSE	0.32		0.33	
Adjusted R ²	0.31		0.35	
N	1976		1873	

Note: Cell entries are ordinary least squares regression coefficients. # $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A2. Franchise Access and Alignment: State-Level Results

	β	S.E.
Intercept	0.07	0.08
Relaxed Nonphoto ID	0.04 [#]	0.02
Strict Nonphoto ID	0.08	0.05
Relaxed Photo ID	-0.11**	0.04
Strict Photo ID	0.15**	0.05
Proof of Citizenship	-0.02	0.05
Early Voting	-0.01	0.02
Same-Day Registration	0.00	0.04
Felon Disenfranchisement	-0.02	0.04
State Fixed Effects?	Yes	
Year Fixed Effects?	Yes	
RMSE	0.17	
Adjusted R ²	0.47	
N	1719	

Note: Cell entries are ordinary least squares regression coefficients. [#] p<0.10, * p<0.05, ** p<0.01, *** p<0.001

**Table A3. Party Regulation and Alignment:
District-Level Results**

	Democrats		Republicans	
	B	S.E.	B	S.E.
Intercept	0.77***	0.14	0.73***	0.09
Semi-Closed	0.24***	0.03	-0.03	0.04
Semi-Open	0.25**	0.09	-0.04	0.07
Open	0.41**	0.13	-0.13	0.08
Nonpartisan	0.22**	0.08	-0.12*	0.05
Sore Loser Law	-0.36***	0.10	-0.32***	0.07
State Fixed Effects?	Yes		Yes	
Year Fixed Effects?	Yes		Yes	
RMSE	0.29		0.29	
Adjusted R ²	0.29		0.35	
N	6129		6121	

Note: Cell entries are ordinary least squares regression coefficients. # p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Table A4. Party Regulation and Alignment: State-Level Results

	B	S.E.
Intercept	0.20*	0.08
Semi-Closed	0.03	0.03
Semi-Open	0.02	0.05
Open	0.10	0.08
Nonpartisan	0.07	0.05
Sore Loser Law	-0.17***	0.05
State Fixed Effects?	Yes	
Year Fixed Effects?	Yes	
RMSE	0.17	
Adjusted R ²	0.46	
N	1719	

Note: Cell entries are ordinary least squares regression coefficients. # p<0.10, * p<0.05, ** p<0.01, *** p<0.001

**Table A5. Party Regulation and Responsiveness:
State-Level Results**

	B	S.E.
Intercept	0.92*	0.38
<i>Interactions with Change in Presidential Vote</i>		
Semi-Closed	-0.01	0.02
Semi-Open	-0.01	0.01
Open	0.03	0.02
Nonpartisan	-0.04#	0.02
Sore Loser Law	0.01	0.02
<i>Main Effects</i>		
Semi-Closed	0.05	0.12
Semi-Open	-0.53*	0.21
Open	-0.46	0.44
Nonpartisan	-0.14	0.20
Sore Loser Law	-0.36	0.31
Change in Presidential Vote	0.00	0.02
State Fixed Effects?	Yes	
Year Fixed Effects?	Yes	
RMSE	0.36	
Adjusted R ²	0.17	
N	317	

Note: Cell entries are ordinary least squares regression coefficients. # p<0.10, * p<0.05, ** p<0.01, *** p<0.001

**Table A6. Campaign Finance and Alignment:
District-Level Results**

	Democrats		Republicans	
	B	S.E.	B	S.E.
Intercept	0.82***	0.15	0.45***	0.13
Individual Contribution Limit	-0.07*	0.03	-0.09*	0.04
Corporate Contribution Limit	-0.05	0.04	0.15***	0.04
Union Contribution Limit	-0.02	0.03	-0.09*	0.04
PAC Contribution Limit	0.05	0.03	-0.01	0.05
Corporate Spending Ban	0.06	0.07	-0.08#	0.05
Union Spending Ban	-0.11	0.08	0.06	0.07
Partial Public Financing	0.13*	0.06	0.36***	0.04
Full Public Financing	0.06	0.04	0.11*	0.05
State Fixed Effects?	Yes		Yes	
Year Fixed Effects?	Yes		Yes	
RMSE	0.29		0.29	
Adjusted R ²	0.29		0.35	
N	6177		6178	

Note: Cell entries are ordinary least squares regression coefficients. # p<0.10, * p<0.05, ** p<0.01, *** p<0.001

**Table A7. Campaign Finance and Alignment:
State-Level Results**

	β	S.E.
Intercept	0.16*	0.07
Individual Contribution Limit	0.08#	0.04
Corporate Contribution Limit	-0.09	0.06
Union Contribution Limit	0.02	0.04
PAC Contribution Limit	-0.07	0.05
Corporate Spending Ban	-0.11***	0.03
Union Spending Ban	0.04	0.03
Partial Public Financing	-0.04	0.03
Full Public Financing	-0.06	0.05
State Fixed Effects?	Yes	
Year Fixed Effects?	Yes	
RMSE	0.17	
Adjusted R ²	0.47	
N	1719	

Note: Cell entries are ordinary least squares regression coefficients. # $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

**Table A8. Campaign Finance and Responsiveness:
State-Level Results**

	B	S.E.
Intercept	0.56*	0.26
<i>Interactions with Change in Presidential Vote</i>		
Individual Contribution Limit	0.02	0.02
Corporate Contribution Limit	0.05#	0.02
Union Contribution Limit	-0.04	0.03
PAC Contribution Limit	-0.03#	0.02
Corporate Spending Ban	0.03	0.02
Union Spending Ban	-0.02	0.03
Partial Public Financing	0.05	0.05
Full Public Financing	-0.01	0.04
<i>Main Effects</i>		
Individual Contribution Limit	0.05	0.36
Corporate Contribution Limit	0.33	0.42
Union Contribution Limit	-0.49*	0.23
PAC Contribution Limit	-0.01	0.09
Corporate Spending Ban	-0.44***	0.12
Union Spending Ban	0.15	0.19
Partial Public Financing	-1.45**	0.55
Change in Presidential Vote	0.01	0.01
State Fixed Effects?	Yes	
Year Fixed Effects?	Yes	
RMSE	0.33	
Adjusted R ²	0.28	
N	317	

Note: Cell entries are ordinary least squares regression coefficients. # p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Table A9. Redistricting and Alignment: District-Level Results

	Democrats		Republicans	
	B	S.E.	B	S.E.
Intercept	0.89***	0.17	0.41**	0.15
Compactness	-0.42***	0.10	-0.42***	0.09
Political Subdivisions	0.33***	0.07	-0.12**	0.05
Communities of Interest	-0.07	0.05	0.00	0.04
Prior District Core	-0.10#	0.06	0.01	0.03
Incumbent Protection	0.32**	0.10	0.00	0.09
Divided Government	-0.01	0.02	0.04#	0.02
Commission Plan	0.14*	0.07	0.13**	0.04
Court Plan	-0.05*	0.02	-0.01	0.01
State Fixed Effects?	Yes		Yes	
Year Fixed Effects?	Yes		Yes	
RMSE	0.29		0.29	
Adjusted R ²	0.29		0.35	
N	6177		6179	

Note: Cell entries are ordinary least squares regression coefficients. # p<0.10, * p<0.05, ** p<0.01, *** p<0.001

Table A10. Redistricting and Alignment: State-Level Results

	B	S.E.
Intercept	-0.27*	0.12
Compactness	0.30***	0.08
Political Subdivisions	0.07	0.07
Communities of Interest	0.00	0.06
Prior District Core	0.13***	0.04
Incumbent Protection	-0.15#	0.09
Divided Government	0.01	0.02
Commission Plan	-0.09*	0.04
Court Plan	0.00	0.02
State Fixed Effects?	Yes	
Year Fixed Effects?	Yes	
RMSE	0.17	
Adjusted R ²	0.47	
N	1719	

Note: Cell entries are ordinary least squares regression coefficients. # p<0.10, * p<0.05, ** p<0.01, *** p<0.001

**Table A11. Redistricting and Responsiveness:
State-Level Results**

	B	S.E.
Intercept	0.44	0.49
<i>Interactions with Change in Presidential Vote</i>		
Compactness	0.01	0.02
Political Subdivisions	0.03 [#]	0.01
Communities of Interest	-0.01	0.02
Prior District Core	-0.01	0.02
Incumbent Protection	0.00	0.03
Divided Government	0.01	0.01
Commission Plan	-0.01	0.02
Court Plan	0.06	0.04
<i>Main Effects</i>		
Compactness	-0.39	0.26
Political Subdivisions	-0.02	0.32
Communities of Interest	0.24	0.22
Prior District Core	-0.02	0.15
Incumbent Protection	-0.10	0.35
Divided Government	-0.03	0.08
Commission Plan	0.08	0.20
Court Plan	-0.36*	0.16
Change in Presidential Vote	-0.02	0.01
State Fixed Effects?	Yes	
Year Fixed Effects?	Yes	
RMSE	0.36	
Adjusted R ²	0.18	
N	317	

Note: Cell entries are ordinary least squares regression coefficients. [#] p<0.10, * p<0.05, ** p<0.01, *** p<0.001

**Table A12. Governmental Structure and Alignment:
District-Level Results**

	Democrats		Republicans	
	β	S.E.	β	S.E.
Intercept	0.54***	0.07	0.35***	0.06
Voter Initiative	0.26***	0.07	0.00	0.06
Legislator Recall	-0.05	0.04	-0.06	0.04
Term Limits	0.07***	0.02	0.05**	0.02
Legislative Professionalism	0.77***	0.19	0.01	0.16
State Fixed Effects?	Yes		Yes	
Year Fixed Effects?	Yes		Yes	
RMSE	0.29		0.29	
Adjusted R ²	0.29		0.35	
N	6170		6166	

Note: Cell entries are ordinary least squares regression coefficients. # $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

**Table A13. Governmental Structure and Alignment:
State-Level Results**

	β	S.E.
Intercept	0.26***	0.08
Voter Initiative	-0.41***	0.09
Legislator Recall	0.22**	0.07
Term Limits	-0.04	0.03
Legislative Professionalism	0.08	0.29
State Fixed Effects?	Yes	
Year Fixed Effects?	Yes	
RMSE	0.17	
Adjusted R ²	0.47	
N	1683	

Note: Cell entries are ordinary least squares regression coefficients. # $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

**Table A14. Governmental Structure and Responsiveness:
State-Level Results**

	B	S.E.
Intercept	-0.27	0.30
<i>Interactions with Change in Presidential Vote</i>		
Voter Initiative	-0.03*	0.02
Legislator Recall	0.01	0.01
Term Limits	0.01	0.01
Legislative Professionalism	0.02	0.08
<i>Main Effects</i>		
Voter Initiative	0.23	0.20
Legislator Recall	-0.38	0.42
Term Limits	0.35#	0.19
Legislative Professionalism	2.92	2.48
Change in Presidential Vote	0.03#	0.01
State Fixed Effects?	Yes	
Year Fixed Effects?	Yes	
RMSE	0.36	
Adjusted R ²	0.17	
N	309	

Note: Cell entries are ordinary least squares regression coefficients. # p<0.10, * p<0.05, ** p<0.01, *** p<0.001

**Table A15. All Electoral Policies and Alignment:
District-Level Results**

	Democrats		Republicans	
	B	S.E.	B	S.E.
Intercept	0.65***	0.18	1.53***	0.15
Semi-Closed	0.15***	0.04	-0.07	0.05
Semi-Open	0.29**	0.09	-0.13#	0.07
Open	0.40**	0.13	-0.12	0.08
Nonpartisan	0.22*	0.08	-0.12*	0.05
Sore Loser Law	-0.37***	0.10	-0.32***	0.08
Individual Contribution Limit	-0.04	0.04	-0.10*	0.04
Corporate Contribution Limit	-0.03	0.04	0.13**	0.04
Union Contribution Limit	-0.03	0.03	-0.08*	0.04
PAC Contribution Limit	0.04	0.03	-0.01	0.05
Corporate Spending Ban	0.08	0.07	-0.08#	0.05
Union Spending Ban	-0.13	0.08	0.04	0.07
Partial Public Financing	0.03	0.17	0.39**	0.14
Full Public Financing	-0.10*	0.04	0.16**	0.05
Compactness	-0.35***	0.11	-0.44***	0.09
Political Subdivisions	0.28***	0.08	-0.19***	0.05
Communities of Interest	-0.06	0.06	0.02	0.04
Prior District Core	-0.09	0.06	0.01	0.04
Incumbent Protection	0.27*	0.12	-0.15	0.12
Divided Government	0.02	0.02	0.01	0.02
Commission Plan	0.22**	0.08	0.07	0.06
Court Plan	-0.03#	0.02	0.01	0.02
Voter Initiative	0.22	0.14	-0.06	0.09
Legislator Recall	-0.03	0.04	-0.06	0.05
Term Limits	0.01	0.02	0.02	0.02
Legislative Professionalism	0.43*	0.20	-0.12	0.17
State Fixed Effects?	Yes		Yes	
Year Fixed Effects?	Yes		Yes	
RMSE	0.28		0.29	
Adjusted R ²	0.30		0.36	
N	6129		6121	

Note: Cell entries are ordinary least squares regression coefficients. # $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

**Table A16. All Electoral Policies and Alignment:
State-Level Results**

	β	S.E.
Intercept	0.14	0.15
Semi-Closed	0.05	0.03
Semi-Open	0.11 [#]	0.06
Open	0.08	0.09
Nonpartisan	0.11 [#]	0.06
Sore Loser Law	-0.16**	0.05
Individual Contribution Limit	0.06	0.04
Corporate Contribution Limit	-0.10 [#]	0.06
Union Contribution Limit	0.02	0.04
PAC Contribution Limit	-0.07	0.05
Corporate Spending Ban	-0.10**	0.03
Union Spending Ban	0.04	0.03
Partial Public Financing	-0.05	0.04
Full Public Financing	-0.06	0.06
Compactness	0.26***	0.08
Political Subdivisions	0.09	0.07
Communities of Interest	0.02	0.06
Prior District Core	0.12***	0.04
Incumbent Protection	-0.18*	0.09
Divided Government	0.03	0.02
Commission Plan	-0.14**	0.05
Court Plan	0.01	0.02
Voter Initiative	-0.56***	0.12
Legislator Recall	0.21**	0.07
Term Limits	-0.09**	0.03
Legislative Professionalism	-0.02	0.31
State Fixed Effects?	Yes	
Year Fixed Effects?	Yes	
RMSE	0.17	
Adjusted R ²	0.49	
N	1683	

Note: Cell entries are ordinary least squares regression coefficients. [#] p<0.10, * p<0.05, ** p<0.01, *** p<0.001

**Table A17. All Electoral Policies and Responsiveness:
State-Level Results**

	Interactions with Change in Presidential Vote		Main Effects	
	β	S.E.	β	S.E.
Semi-Closed	-0.04	0.04	-0.08	0.16
Semi-Open	-0.05#	0.03	-0.66	0.68
Open	0.04	0.03	-0.93*	0.46
Nonpartisan	0.02	0.05	-0.52*	0.21
Sore Loser Law	0.06	0.04	-0.28	0.28
Individual Contribution Limit	0.03	0.05	-0.55	0.96
Corporate Contribution Limit	0.03	0.04	0.74	0.51
Union Contribution Limit	0.01	0.05	-	0.37
PAC Contribution Limit	-0.06#	0.03	1.25***	0.76
Corporate Spending Ban	0.04	0.03	1.30#	0.18
Union Spending Ban	-0.02	0.04	-0.39*	0.23
Partial Public Financing	-0.02	0.07	0.19	0.65
Full Public Financing	0.00	0.08	-1.19#	1.06
Compactness	-0.01	0.02	-0.39	0.53
Political Subdivisions	0.01	0.03	-0.49	0.51
Communities of Interest	0.00	0.03	-0.34	0.38
Prior District Core	-0.02	0.05	0.03	0.22
Incumbent Protection	0.01	0.06	0.14	0.42
Divided Government	0.00	0.03	-0.27	0.16
Commission Plan	-0.04	0.03	0.03	0.48
Court Plan	0.04	0.05	0.79#	0.19
Voter Initiative	-0.02	0.04	-0.07	0.97
Legislator Recall	-0.04	0.03	-0.23	0.90
Term Limits	0.02	0.02	-0.27	0.29
Legislative Professionalism	-0.02	0.09	0.55	1.92
Change in Presidential Vote			6.74***	0.06
Intercept			0.55	0.98
State Fixed Effects?		Yes		
Year Fixed Effects?		Yes		
RMSE		0.32		
Adjusted R ²		0.34		
N		313		

Note: Cell entries are ordinary least squares regression coefficients. # $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$